

1 BY MR. TENREIRO:

2 Q. Are you talking about the Hinman speech?

3 A. I think -- I think there was one other. I
4 don't remember exactly.

5 Q. Are you aware whether Hinman was a
6 commissioner or just a division director? Do you know
7 the difference?

8 A. I don't know the difference.

9 Q. Why was John Roscoe at the meeting? What
10 role did he have in procuring it?

11 A. I don't know.

12 Q. Do you know why he was there?

13 A. I don't.

14 Q. Did you take notes at the meeting?

15 A. I did not.

16 Q. Did Mr. Garlinghouse?

17 A. I don't recall.

18 Q. Did you observe anyone taking notes?

19 A. Not that I recall.

20 Q. The time of the meeting were you aware SEC
21 staff was investigating XRP's status under the security
22 laws?

23 A. I was either aware at that time or shortly
24 thereafter. I am not positive.

25 Q. Was the meeting with Chair Clayton relating

1 to this?

2 MR. CERESNEY: Relating to what.

3 BY MR. TENREIRO:

4 Q. The SEC staff's investigation as to XRP's
5 status under the securities laws.

6 A. Again, because I can't separate the two meet
7 beings, I can't say for sure. I know that was discussed
8 at one of those two meetings, but I'm pretty sure that
9 was the second one.

10 Which doesn't necessarily mean it wasn't discussed
11 at the first one, but I can't -- I can't recall.

12 Q. Okay. Second meeting, just to be clear, is
13 the Corp Fin meeting?

14 A. Yes.

15 Q. What did you say at the meeting with Chair
16 Clayton?

17 A. My recollection is that I discussed the role
18 of the validators, the status of the XRP Ledger network,
19 some of the history of the company, and that's all I
20 recall.

21 Q. What did Mr. Garlinghouse say at the meeting?

22 A. I don't recall.

23 Q. Did Mr. Clayton speak at the meeting? Chair
24 Clayton?

25 A. My recollection is that he spoke very little,

1 but that he did speak occasionally.

2 Q. Who else spoke that was not Chair Clayton,
3 Garlinghouse, and yourself?

4 A. I don't have any specific recollection of who
5 else spoke at that meeting. Again, it's hard for me,
6 because I can't separate whether recollections I have of
7 people speaking were from the first or the second
8 meeting.

9 Q. But just to be clear, you don't recall Chair
10 Clayton being at the second meeting?

11 A. I don't believe he was.

12 Q. And no -- and Commissioner Peirce was not at
13 the second meeting?

14 A. No.

15 Q. Not at the first meeting either?

16 A. No.

17 Q. Have you heard of Commissioner Roisman?

18 A. I believe have heard that name.

19 Q. Does that you haven't met him?

20 A. I don't believe so.

21 Q. Have you ever spoken to him?

22 A. No.

23 Q. At the meeting with Chair Clayton, did he
24 comment on the status of the SEC's investigation into
25 Ripple's conduct?

1 A. Not that I recall.

2 Q. Did you discuss legal issues at that meeting?

3 A. I know we discussed them at the second
4 meeting. I don't recall discussing them at the first
5 meeting.

6 Q. You don't recall discussing them at the first
7 meeting, but it's possible you did, or your recollection
8 is that you did not discuss them at the first meeting?

9 A. It's possible that we did. I just don't
10 specifically recall.

11 Q. Did Chair Clayton comment on the legal status
12 of XRP under the securities laws at that meeting?

13 A. I don't specifically recall him commenting.

14 Q. Did he convey any of the other commissioners'
15 views as to the status of XRP under securities laws?

16 (Thereupon, an informal discussion was
17 held off the record with the shorthand
18 reporter.)

19 BY MR. TENREIRO:

20 Q. Did he convey to you any of the other
21 commissioners' views as to the status of XRP under the
22 securities laws?

23 A. Not that I recall.

24 Q. Did he convey to you any SEC staff members'
25 views as to the status of XRP under the securities laws?

1 A. Not that I recall.

2 Q. Did Chair Clayton offer you assurances that
3 he had concluded that XRP was not a security?

4 A. Not that I recall.

5 Q. Would you recall something like that?

6 A. That I think I would recall.

7 Q. I'm asking you again:

8 Did he offer you assurances that he had concluded
9 that XRP was not a security?

10 MR. CERESNEY: Objection, asked and
11 answered.

12 THE WITNESS: I don't recall one.

13 And I think if he did, I would have
14 recalled it, but I don't recall.

15 BY MR. TENREIRO:

16 Q. Did he ask any questions? Did he ask you any
17 questions?

18 A. I believe he did participate in some of the
19 technical questions that were asked.

20 Q. Do you remember the questions?

21 A. I remember the scope was -- involved things
22 like the volume of validators, the status of the XRP
23 Ledger, the history of the company. I don't recall any
24 more details than that.

25 Q. Did he ask Mr. Garlinghouse questions?

1 A. I'm sure he must have, but I don't recall
2 any.

3 Q. Did you arrive --

4 Did the meeting commence when you and
5 Mr. Garlinghouse were both already there?

6 (Pause.)

7 THE WITNESS: I think so, but I'm not
8 sure.

9 BY MR. TENREIRO:

10 Q. Did you both leave together, Mr. Garlinghouse
11 and you?

12 A. Yes.

13 Q. Is there a document that would refresh your
14 memory as to what was said at the meeting?

15 A. Not that I know of.

16 Q. Did you have notes in advance of the meeting?

17 A. I did not.

18 Q. Did you have talking points?

19 A. Not that I recall.

20 Q. Did you have anyone prepare talking points
21 for you?

22 A. I don't recall having any specific talking
23 points that were communicated to me prior to that
24 meeting by anyone.

25 Q. Okay. Who had the idea for the meeting?

1 MR. CERESNEY: Again, if you had
2 discussions with counsel, obviously don't
3 reveal that.

4 THE WITNESS: My understanding at the
5 time, and I don't recall what it was based on,
6 was that Brad Garlinghouse wanted me at the
7 meeting to answer questions about the early
8 history of the company and the technical
9 status of the XRP Ledger and the network, but
10 I don't know other than that.

11 BY MR. TENREIRO:

12 Q. Well, in the context of Mr. Garlinghouse
13 expressing to you that he wanted you at the meeting to
14 answer questions, technical questions, did express to
15 you why he wanted -- why he wanted to have that meeting?

16 A. I don't recall him specifically mentioning
17 some objective for that meeting.

18 Q. All right. Now, let's go back to the
19 technical stuff. Exhibit 77.

20 (Thereupon, a document entitled "Technical
21 FAQ - XRPL.org" was introduced as DS Exhibit 77
22 for identification.)

23 BY MR. TENREIRO:

24 Q. Exhibit 77. Oh, yeah. Did you debrief with
25 other people at Ripple after the meeting about what had

1 happened at the meeting?

2 A. I believe Brad made a brief summary to
3 staff -- staff meeting, his direct reports.

4 Q. That included you at that time, already?

5 A. I think at that time, it didn't. I think
6 that was in that window where I was still reporting
7 to -- you know, I'm -- no, I think I did report to Brad.

8 Otherwise, I wouldn't -- I probably wouldn't have
9 remembered that because I wouldn't have been in the
10 meeting, so prob- -- I have to infer based on fragmented
11 recollection, but I believe he made a report to staff
12 just summarizing the meeting.

13 Q. What did he say in the summary?

14 (Pause.)

15 BY MR. TENREIRO:

16 Q. Was it written or verbal?

17 A. Verbal.

18 Q. Okay. Do you recall what he said?

19 A. I recall the gist of what he said was that he
20 stated that the meeting had taken place, identified who
21 went to the meeting and -- you know, stated that he was
22 satisfied.

23 You know, he thought the meeting went well. Just
24 general words to that effect. I don't recall any
25 specific comments about the details of the meeting.

1 Q. Did he make any comments about his expected
2 outcome of the SEC's investigation based upon the
3 conversation that occurred at the meeting?

4 A. I don't remember anyone discussing an
5 expectation of any specific results of that particular
6 meeting.

7 Q. Okay. Exhibit 77.

8 (Thereupon, an informal discussion was
9 held off the record.)

10 BY MR. TENREIRO:

11 Q. First, I wanted to ask you if XRPL.org is a
12 Ripple website.

13 A. I believe it originally was, and I think now
14 it's joint -- it's -- I think now the XRPL Foundation
15 has some level of control over it. I don't know where
16 it is now.

17 Q. When did that change?

18 A. Within the past couple months.

19 Q. Last couple of months?

20 A. I think. I'm not exactly sure.

21 Q. So it's not years?

22 A. No, I don't believe so.

23 Q. Okay. Do you have any input into the content
24 of this technical FAQ?

25 A. Yes.

1 Q. What is your input?

2 A. I didn't write it, but I reviewed and
3 discussed its content with other people.

4 Q. And is it fair to say that the language in
5 the technical FAQ has changed over the years?

6 A. I suspect so.

7 Q. Okay. This is --

8 I printed this last night, in fact, so it's perhaps
9 the most current one. The question that says "Which UNL
10 should I select?" -- one of the things that it says
11 there is:

12 "Currently, Ripple provides a default and
13 recommended list which we expand based on watching the
14 history of validators run by Ripple and third parties."

15 MR. CERESNEY: You skipped the first
16 sentence, didn't you?

17 MR. TENREIRO: Yes, I did. I was just
18 focusing on that second sentence.

19 BY MR. TENREIRO:

20 Q. Are there other criteria that Ripple utilizes
21 other than the history of validators to recommend?

22 A. I believe the other -- there are other
23 criteria that we use, yes.

24 Q. What are they?

25 A. Some sort of institutional commitment to

1 running the validator. There was one other -- it's
2 slipping any mind right now, but I mentioned it earlier.

3 Q. Okay. That's fine. If you recall, just let
4 me know.

5 A. Yeah.

6 Q. I know you mentioned something else earlier.

7 A. Yeah.

8 Q. I also can't remember.

9 "What is the validator incentive structure for
10 validators not run by Ripple?" Do you see that
11 question?

12 A. Yes.

13 Q. It says:

14 "The primary incentive to run a validator is to
15 preserve and protect the stable and sensible evolution
16 of the network."

17 A. Uh-huh.

18 MR. CERESNEY: "Stable operation."

19 MR. TENREIRO: Huh?

20 MR. CERESNEY: You skipped the word
21 "operation," but go ahead.

22 BY MR. TENREIRO:

23 Q. Okay. "The stable operation and sensible and
24 evolution of the network." I guess I don't understand
25 what that means.

1 Why would someone care about protecting the stable
2 operation and sensible evolution of the network?

3 A. Well, one example would be if they're an
4 exchange and they make revenue of XRP.

5 (Thereupon, an informal discussion was
6 held off the record with the shorthand
7 reporter.)

8 THE WITNESS: If they run an exchange,
9 their revenue depends on the stable operation
10 of the ledger.

11 BY MR. TENREIRO:

12 Q. Maybe I should have just continued reading,
13 where you say:

14 "It is the validators who decide the evolution of
15 the XRP Ledger, so any business that uses or depends on
16 the XRP Ledger has an inherent incentive to assure the
17 reliability and stability of the network."

18 Is that what you mean, for example, the exchanges?

19 A. Yes.

20 Q. So what businesses might depend on the XRP
21 Ledger?

22 A. Well, exchange is obviously anyone else who
23 uses the XRP Ledger, people who use the decentralized
24 exchange.

25 Q. Well, I -- is "in use" and "depending" two

1 different things, though?

2 Like the exchanges don't -- they depend on the XRP
3 Ledger for their XRP-related revenue, correct, but they
4 can presumably --

5 A. Find other revenue.

6 Q. So wouldn't you say --

7 Isn't it fair to say the exchanges use the ledger
8 as opposed to depend on the ledger?

9 A. I would say their XRP revenue depends on the
10 ledger.

11 Q. Okay. Are there entities that depend on the
12 XRP other than the exchanges?

13 A. There are -- there are companies that are
14 built around the utility of the XRP Ledger while a
15 provider's -- uh, gateways -- those types of businesses
16 are exclusively focused or at least primarily or
17 significantly focused on the XRP Ledger, so I don't
18 think you could argue that they are not depending on
19 them.

20 Q. No. Sure. I didn't mean to. I'm trying to
21 get an example.

22 So right now, I've heard businesses that depend on
23 the revenue --

24 A. Right.

25 Q. -- from dealing with the XRP Ledger. Is

1 there any other type of entity that might be
2 incentivized or is it always a monetary incentive?

3 A. I think there are definitely individuals or
4 enthusiasts, power users who run validators just because
5 they find it interesting technically.

6 It may be connected with things they are doing
7 professionally or it may not, and they definitely have
8 run validators.

9 Q. Yeah, but my question is:

10 Are they incentivized to ensure that the network --
11 you know, continues to function?

12 A. I think you can argue if a person does
13 something, they are necessarily incentivized to some
14 extent; maybe their intellectual curiosity or maybe that
15 it facilitates some other project they are doing. Hard
16 to know what might incentivize other people.

17 Q. Are any of those people on Ripple's dUNL
18 list?

19 A. I believe there is at least one or two.

20 Q. Who are they?

21 A. I would have to see the list to tell you, but
22 I'm trying to remember the name of the company.

23 (Thereupon, an informal discussion was
24 held off the record.)

25 THE VIDEOGRAPHER: Going off at 12:27.

1 (Recess taken at 12:27 p.m.)

2 (Resumed at 12:31 p.m.)

3 THE VIDEOGRAPHER: Back on at 12:31.

4 BY MR. TENREIRO:

5 Q. Right. So the recollection is not refreshed
6 from looking at the list?

7 A. No. Thought it would be, but no.

8 Q. Okay. Ripple's -- so here, we were talking
9 about the incentives that people might have to preserve
10 and protect the stable operation and sensible evolution
11 of the network.

12 What are Ripple's incentives? Does Ripple have
13 incentive to do that, preserve and protect, etc.?

14 A. Yes.

15 Q. And what are the nature of the incentives?

16 A. The nature of the incentive is that Ripple
17 holds a lot of XRP.

18 Q. What about reputational incentives?

19 A. Yeah, there are reputational incentives as
20 well.

21 Q. If the network -- you know.

22 Presumably, if the network performed poorly --
23 however you define that -- that wouldn't look good for
24 the company; fair to say?

25 MR. CERESNEY: Objection to form.

1 MR. TENREIRO: Sorry, Daphna.

2 THE WITNESS: I think people would --
3 whether they should or shouldn't, I think
4 people would perceive that as at least
5 dishonest and a failing on Ripple's part.

6 BY MR. TENREIRO:

7 Q. And there's been occasions when the network
8 has stalled and people have called on Ripple to sort of
9 fix it, right?

10 MR. CERESNEY: Objection to form.

11 THE WITNESS: Not really. I don't think
12 so.

13 BY MR. TENREIRO:

14 Q. Have there been occasions where exchanges --
15 you know, come to Ripple for issues they are having
16 with -- interact with the ledger?

17 A. With their own interactions with the ledger,
18 yes.

19 Q. Why do they come to Ripple?

20 MR. CERESNEY: Objection. Objection to
21 form.

22 THE WITNESS: We provide -- we provided a
23 pathway for them to easily contact -- you
24 know, employees that we have who have
25 expertise.

1 BY MR. TENREIRO:

2 Q. Does anyone else provide that pathway or
3 platform?

4 A. I believe so.

5 Q. Who?

6 A. I believe there are two companies, whose
7 names -- same companies, I'm trying -- I was trying to
8 recall well. I think is [REDACTED], and the
9 other --

10 (Thereupon, an informal discussion was
11 held off the record with the shorthand
12 reporter.)

13 THE WITNESS: [REDACTED]. I could be
14 wrong, and the other one is -- what's the name
15 of the company? I can't remember the -- the
16 name of the company, but I know one of their
17 products is called [REDACTED], and they
18 also provide that type of expertise.

19 BY MR. TENREIRO:

20 Q. And do you --

21 Tell me the names of the individuals who have your
22 level of expertise on the XRP Ledger.

23 A. Put a small number of people. [REDACTED]
24 [REDACTED]

25 (Thereupon, an informal discussion was

1 held off the record.)

2 THE WITNESS: [REDACTED]

3 BY MR. TENREIRO:

4 Q. [REDACTED] work at Ripple?

5 A. Yes, [REDACTED] works at Ripple.

6 Q. Who was the next one?

7 A. [REDACTED]

8 Q. Another Ripple employee? Oh, [REDACTED]

9 A. No, his -- he has -- the company's name, I
10 can't remember. There are at least three other people
11 who I know whose names I can't recall.

12 Q. They are not Ripple employees?

13 A. Non-Ripple, yeah.

14 Q. It's your belief that they have the same
15 level of technical expertise over the ledger that you
16 do?

17 A. It gets tricky because I have more knowledge
18 in some areas and less knowledge in other areas, but I
19 would say they -- they have -- they -- without trying to
20 directly compare them to me or saying greater or less
21 than, they certainly have enough knowledge to do any --
22 anything you needed them to do on the XRP Ledger.

23 Q. Going back to the exhibit, you say -- I'm
24 still on the question about what is the validator
25 incentive structure. You say:

1 "Ripple avoids paying XRP as a reward for operating
2 the validator so that such incentives do not warp the
3 behavior of validators."

4 A. Yes.

5 Q. How -- in paying them XRP as a reward, would
6 that be a financial payment or incentive?

7 A. It could be. If they -- if they could sell
8 it, it would be a financial incentive.

9 Q. XRP has a market price today, right?

10 A. Yes, at this time, yes.

11 Q. Why would rewarding them with financial
12 compensation warp their behavior?

13 A. Because they would be incentivized to
14 continue to act to continue to receive that compensation
15 rather than follow their own -- their own incentives or
16 interests.

17 Q. So Ripple wants to reward -- wants to
18 encourage them to follow their own incentives or
19 interests?

20 A. Yes.

21 Q. Doesn't Ripple have financial relationships
22 with some of the validators on their UNL list such as
23 COIL?

24 A. Some of them, yes.

25 Q. How many of them?

1 A. I don't know.

2 Q. It more than half?

3 A. I think so, but I don't know.

4 MR. CERESNEY: Objection to form.

5 BY MR. TENREIRO:

6 Q. On the next page, it says "Role of XRP. Why
7 does Ripple use XRP holdings?"

8 A. Yes.

9 Q. "Ripple's XRP holdings incentivize the
10 company to make the XRP Ledger as useful as possible."

11 Is that referring to what we discussed a second ago
12 about the nature of Ripple's incentives?

13 A. I'm not really sure.

14 Q. So what does it refer to?

15 A. Again, I'm not really sure.

16 Q. Okay.

17 (Pause.)

18 (Thereupon, a two-page GitHub printout was
19 introduced as DS Exhibit 11 for identification.)

20 BY MR. TENREIRO:

21 Q. Let's look at Exhibit 11, please. This is a
22 GitHub format, and Ripple's source code for the ledger
23 is on GitHub, right?

24 A. Yes.

25 (Thereupon, an informal discussion was

1 held off the record with the shorthand
2 reporter.)

3 BY MR. TENREIRO:

4 Q. The question is: Do you recognize this text
5 file?

6 A. Yes.

7 Q. What is it?

8 A. This is the text file that selects the --
9 that will select the UNL and this is the default version
10 of that file.

11 Q. The part of the text -- sorry, the part of
12 the file that selects the UNL is line 55 through 59?

13 A. That's correct.

14 Q. The rest is just commentary?

15 A. Yes.

16 Q. Who wrote the commentary?

17 A. I would have to check the GitHub history to
18 tell you for sure, but -- yeah, I don't know.

19 Q. At the bottom, on line 27 through line 31 --

20 A. Uh-huh.

21 Q. -- it says "List of URIs serving list for
22 recommended validators."

23 A. Uh-huh.

24 Q. Then it has examples: "Ripple, COIL," and
25 then two -- what are the other two? Are those just

1 local --

2 A. Yeah. The two are examples of how the person
3 who fill out that field if they wanted to do it to
4 provide their own UNL rather than pull it from somebody
5 else.

6 Q. Why does Ripple provide its examples from
7 Ripple and COIL'S recommended lists?

8 A. Probably because those were the two that we
9 were specifically aware of at that time.

10 Q. Okay. On lines 49 to 53, there's a warning
11 that says:

12 "Changing these values could cause your rippled
13 instances to see a validated ledger that contradicts
14 other rippled instances validated ledgers."

15 I'm going to stop there. What does "rippled
16 instance" mean?

17 A. That means a node on the XRP Ledger.

18 Q. And then continuing:

19 "a/k/a a ledger fork, if your validator lists do
20 not sufficiently overlap with the lists used by others."
21 Do you see that?

22 A. Yes.

23 Q. Is this what you were referring to about the
24 need to have 80 to 90 percent overlap?

25 A. Yes.

1 Q. At first, you concluded it was about 20
2 percent, right?

3 A. Depends on the scenario you're trying to
4 prevent. If you're trying to prevent non-operation or
5 if you're trying to prevent a full unintentional fork.

6 (Thereupon, an informal discussion was
7 held off the record.)

8 BY MR. TENREIRO:

9 Q. If you're trying to prevent non-operation,
10 what overlap do you need?

11 A. You need more than 20 percent.

12 Q. If you were trying to prevent an
13 unintentional fork?

14 A. I'm sorry. I got it backward.

15 Q. Yeah.

16 A. If you're trying to prevent non-operation,
17 you need for practical purposes you need the a least 80
18 percent. You can argue 90.

19 To prevent non-operation, you want more than 20
20 percent.

21 Q. Ripple wants to prevent non-operation,
22 correct?

23 A. We -- we don't want people to get
24 non-operation unless -- under circumstances in which
25 they haven't specifically chosen not to operate.

1 We do want people to get non-operation if the
2 software is operating in ways they don't want did to
3 operate. That's a critical system safety.

4 Q. That's fair. Your conclusion about the 20
5 percent overlap was in the whitepaper for the ledger, is
6 that correct?

7 A. I believe so. That paper is more concerned
8 with avoiding an unintentional fork than it is with
9 preventing non-operation, but I believe it does discuss
10 both scenarios.

11 Q. The whitepaper now has a disclaimer on it
12 that it's essentially outdated?

13 A. Yes.

14 Q. Why was that disclaimer put on it?

15 A. After the paper was -- well, so our
16 understanding in the space has been constantly evolving.
17 This is brand-new technology.

18 [REDACTED] found some defects in the analysis
19 in that paper, and so we revised the analysis.

20 Q. Does that defect have to do with the
21 percentage of overlap?

22 A. It does.

23 Q. Was [REDACTED] also involved in finding that
24 defect?

25 A. Yes, yes.

1 (Thereupon, a multi-page document entitled
2 "The Ripple Protocol Consensus Algorithm" was
3 introduced as DS Exhibit 14 for identification.)

4 BY MR. TENREIRO:

5 Q. Let's look at Exhibit 14. I just want you to
6 tell me if this is the whitepaper we've been discussing.

7 A. This is the original whitepaper.

8 Q. With the disclaimer, right?

9 A. Yes.

10 Q. That's the first page?

11 A. Yes.

12 (Thereupon, an informal discussion was
13 held off the record.)

14 BY MR. TENREIRO:

15 Q. So Mr. Schwartz, this is the whitepaper we've
16 been discussing?

17 A. Yes.

18 Q. You are one of the authors?

19 A. Yes.

20 Q. Where was this published?

21 A. I believe it was published to arXiv.

22 A-R-X-I-V.

23 Q. Was it published before or after the XRP
24 Ledger was deployed publicly?

25 A. I think after, but I'm not certain.

1 Q. Do you know how much after?

2 A. I don't.

3 Q. Okay. "Section 3.3, Agreement."

4 Is that the section that discusses your proof or
5 your, I guess, theory as to how much overlap is
6 required?

7 A. Yes.

8 Q. And you're saying this is with respect to
9 unintentional forks?

10 A. This is with respect to unintentional forks,
11 correct.

12 Q. Okay, and your analysis was not -- you know,
13 probability-based? It was not probabilistic?

14 A. Right.

15 Q. Okay, and [REDACTED] was?

16 A. We -- we connected two analyses. This one
17 was not intended to be probabilistic. The next one --
18 the subsequent one had both the probabilistic and the
19 non-probabilistic anal- -- as -- as -- as I understand
20 it.

21 I'd have to look it to be sure, but I believe the
22 subsequent one had both probabilistic and
23 non-probabilistic analyses.

24 Q. You still concluded it was only 20 percent?

25 A. Twenty percent is enough to -- you know what?

1 I'm not sure. I'm not sure.

2 Q. Did you publish another whitepaper?

3 Is that what you mean, or are you referring to the
4 [REDACTED] paper?

5 A. I am referring to the [REDACTED]
6 paper --

7 Q. Let's look at that.

8 A. -- but I don't recall.

9 (Thereupon, a multi-page document entitled
10 "Analysis of the XRP Ledger Consensus Protocol"
11 dated February 21, 2018" was introduced as DS
12 Exhibit 15 for identification.)

13 BY MR. TENREIRO:

14 Q. Let's just look at 15, please. Exhibit 15.
15 The summary probably has what you're looking for --

16 A. Yeah.

17 Q. -- and so does Theorem 8, on page 18.

18 A. Yeah.

19 Q. What role, if any, did you play with respect
20 to putting together this paper?

21 A. Almost none.

22 Q. Okay. They discussed it with you, though?

23 A. Yes.

24 Q. Okay. Were you surprised to find they
25 concluded, contrary to your conclusion, that they needed

1 over 90 percent?

2 A. Yes, I was.

3 Q. Do you agree with them?

4 A. Yes.

5 Q. Okay, and so --

6 Is it fair to say that you remain as probabilistic,
7 by looking at it?

8 A. Yeah. Let me -- let me -- let me be precise.

9 Q. Yes.

10 A. I still believe that sort of for practical
11 purposes, 20 percent and 80 percent is sufficient,
12 but -- but there are --

13 You can carefully construct scenarios in which that
14 fails, and obviously, you would prefer a
15 non-probabilistic guarantee. An absolute, rigid,
16 mathematical proof would be better than a probabilistic
17 guarantee.

18 Q. But with a large number of nodes, that
19 becomes hard, right?

20 A. The probabilistic proof -- the probabilistic
21 proofs become more valid.

22 Q. Right. It's harder to have a
23 non-probabilistic --

24 A. Right.

25 Q. -- with -- with more nodes?

1 A. Exactly.

2 Q. So the probabilistic ones become,
3 essentially, more reliable?

4 A. Yes.

5 Q. Okay, and just to take it back there again,
6 is it fair to say Ripple wants there to be -- you know,
7 continuous operation of the network?

8 MR. CERESNEY: Objection to form.

9 THE WITNESS: Yes.

10 BY MR. TENREIRO:

11 Q. And not --

12 And Ripple wants to prevent -- you know,
13 undesirable -- the term you used was "unintentional
14 forks"?

15 A. Yes.

16 Q. Okay, so is it fair to say that it is
17 Ripple's desire that for this ledger to operate, there
18 be somewhere between 80 and 90 percent of overlap
19 between the nodes on the UNL list that people are using?

20 A. For those people who wish to continue to
21 transact on that ledger stream, yes.

22 Q. On the ledger stream that Ripple wants to
23 continue to transact in, right?

24 A. Yes.

25 Q. That includes the exchanges, presumably?

1 A. Yes.

2 Q. Okay. Did you ever -- did you ever --

3 Has the ledger moved to an alternative consensus
4 algorithm called Cobalt?

5 A. No.

6 Q. Why not?

7 A. Part of -- well, there are a couple reasons.

8 One of them is it's a complex algorithm. It's just
9 a -- it's just a complex and dangerous transition.

10 Q. Okay. Don't make it harder for me. Let's
11 leave it at that. Let's move on.

12 (Thereupon, a three-page e-mail dated
13 4/16/19 from David Schwartz to [REDACTED]
14 was introduced as DS Exhibit 18 for
15 identification.)

16 BY MR. TENREIRO:

17 Q. Let's take a look at Exhibit 18, please.

18 So Exhibit 18 is an e-mail chain where you appear
19 to be answering questions by [REDACTED] Is that the
20 [REDACTED] you mentioned earlier?

21 A. I think the questions came from [REDACTED]
22 at Coinbase --

23 Q. Sorry.

24 A. -- but I'm not sure.

25 Q. Fair enough. The e-mail chain is between you

1 and [REDACTED]?

2 A. Yes, that's correct.

3 Q. Here, you say toward the bottom:

4 "Ripple's recommended UNL has been changing every
5 three weeks or so."

6 A. Yes.

7 Q. Why was it changing so often?

8 A. Well, when you publish a UNL, you have to set
9 an expiration date. You don't want to set an expiration
10 date that's too long, because if something goes wrong,
11 you can't change it.

12 And you don't want it to short in case somebody has
13 a connectivity issue, so three weeks was sort of the
14 compromised case.

15 Q. But does that change who's actually on the
16 list every two weeks?

17 A. Not necessarily.

18 Q. Okay. Understood. On the next page, there's
19 a question, apparently from Coinbase, as you say:

20 "What happens when validators start misbehaving?"

21 Can you please just read your answer to yourself?

22 (Pause.)

23 BY MR. TENREIRO:

24 Q. Towards the middle, you say:

25 "We have had incidents where some validators

1 diverge from the majority of validators, resulting in
2 the inability to form an 80 percent majority."

3 A. Yes.

4 Q. "The code to handle this (called the
5 'preferred ledger' by branch code) has been improved to
6 prevent this."

7 Do you see that?

8 A. Yes.

9 Q. Improved by whom?

10 A. I don't recall who made those specific
11 improvements.

12 Q. Was it Ripple employees?

13 A. I don't -- I don't recall.

14 Q. Okay. Later, you say:

15 "Of course, there's a near certainty that there are
16 still bugs in the code and when misbehavior appears, we
17 try to find the cause and fix it."

18 Who is the "we" in that sentence?

19 A. I don't know who I was referring to, but
20 anyone who notices them.

21 Q. Okay. Does Ripple pay bounties to people who
22 find bugs in the code?

23 A. We do.

24 Q. Why?

25 A. Mostly just to disincentive them from using

1 those bugs to steal the funds from people.

2 Q. Okay. Any other reason?

3 A. The only reason I know of is to incentivize
4 responsible disclosure.

5 Q. Incentivize them to tell you that they find
6 the bug?

7 A. Rather than to try to steal money from people
8 or try to do something terrible to people.

9 Q. Does anyone else pay bounties for identifying
10 bugs with respect to the XRP Ledger code?

11 A. I don't -- I don't know.

12 Q. Okay. Have you ever --

13 Have you ever heard of that? You know, like in
14 time online or anything like that?

15 A. No.

16 Q. Further down, you talk about the fork
17 situation. In answer to the next question, the
18 paragraph begins "For example" -- you know, please read
19 it to yourself. I'm sort of focused on the end, where
20 it says:

21 "At that point, the network would fork with those
22 running Ripple code and UNL or close to it, not having
23 the feature and those running this group's code and
24 recommending UNL are close to it, having the feature."

25 A. Yes.

1 Q. Is this sort of the situation we've been
2 describing as to how a fork could occur?

3 A. This is the intentional fork situation.

4 Q. Where people simply do not agree with each
5 other and have different nodes on their trust list?

6 A. Well, more likely they would agree over
7 system rules.

8 Q. Over?

9 A. System rules.

10 But the same thing could in theory happen. It just
11 seems unlikely that people would want to fork over
12 tie-breaking, essentially.

13 Q. Sure, sure. So let's say --

14 So in other words, 80 percent of nodes agree on a
15 system rule, but the 20 percent that don't -- they just
16 don't want to adopt and fork intentionally?

17 A. Right.

18 Q. That's the scenario?

19 A. They have either option, either go along with
20 the majority or fork.

21 Q. Is a major fork in Ripple's interest?

22 A. I could imagine scenarios where it is and
23 isn't.

24 Q. Right now, is it?

25 A. Again, I can imagine scenarios where it is

1 and isn't.

2 Q. Where are the scenarios where it is?

3 A. Well, suppose somebody wants to mate the XRP
4 Ledger with the DeFi ledger, and they add DeFi features
5 to it.

6 (Thereupon, an informal discussion was
7 held off the record with the shorthand
8 reporter.)

9 THE WITNESS: If somebody wanted to add
10 DeFi features to the XRP Ledger, there would
11 be some resistance because it increases the
12 complexity.

13 But if they fork the ledger, Ripple would
14 have no reason to object to that fork. There
15 would just be more activity.

16 BY MR. TENREIRO:

17 Q. Why hasn't that happened? Not DeFi
18 specifically, but why hasn't it happened that someone
19 comes in to propose something?

20 MR. CERESNEY: Objection to form.

21 THE WITNESS: I don't think there has --
22 I don't think there has been. There just
23 hasn't been that type of disagreement.

24 MR. TENREIRO:
25

1 BY MR. CERESNEY:

2 Q. Okay. At what point did Ripple have -- so at
3 this point, Ripple has fewer than 20 percent of
4 validators of the 150 you mentioned?

5 A. Yes.

6 Q. Okay, and what percentage of Ripple's
7 validators are on Ripple's dUNL list?

8 A. Did you mean to ask what percentage of the
9 validators on the list are Ripple's?

10 Q. Yes.

11 A. I know it's less than 20 percent, but I don't
12 recall the exact number.

13 Q. When did it go below 20?

14 A. I -- I don't recall.

15 Q. Was it in the last year or two years?

16 A. I think it was -- I think it probably wasn't
17 within the last year, but probably was within the last
18 two years.

19 Q. When did it go below 50 percent?

20 A. Again, I don't -- I don't recall.

21 (Thereupon, a 23-page document entitled
22 "Can Ripple labs reverse a payment? - Page 2 -
23 Technical Discussion - Xrp Chat" was introduced
24 as DS Exhibit 46 for identification.)

25 BY MR. TENREIRO:

1 Q. Okay. Let's look at Exhibit 46. This is an
2 excerpt from Chat. My question is going to be on page
3 8. Do you know who "mDuo13" is?

4 A. I think I do. I'm just trying to remember
5 his name. It is -- it is someone I know.

6 Q. Who is it?

7 A. I'm trying to remember his name. [REDACTED]

8 [REDACTED] I believe.

9 Q. Is he a Ripple employee?

10 A. He was, at times.

11 (Thereupon, an informal discussion was
12 held off the record with the shorthand
13 reporter.)

14 BY MR. TENREIRO:

15 Q. I'm going to go back to this point, but on
16 page 13, there's a post by you from January 8th, 2018.
17 In the first paragraph, it says:

18 "While I'd like to be quite confident that this
19 will happen and I think our 2018 decentralization
20 roadmap will get us to that point..."

21 My question is: What is your -- what was Ripple's
22 2018 decentralization roadmap?

23 A. To continue reducing the number of
24 Ripple-operated validators on the UNL and increase the
25 number of nonRipple-operated validators.

1 Q. Going back to -- I'm not going to say his
2 name correctly, but to -- mDuo's post on page 8, it
3 says:

4 "Ripple currently recommends that you trust only
5 the five validators that Ripple runs."

6 Was that statement correct as of that time at that
7 time?

8 A. It -- it could have been. There certainly
9 were times when that was correct. I --

10 Q. Later -- go ahead. Sorry.

11 A. So I -- so I can't be absolutely sure that
12 January 20th -- but that's reasonable.

13 Q. Okay. Further down, he says:

14 "As long as most users of the XRP Ledger continue
15 to trust only the five validators that Ripple
16 recommends, then Ripple controls the network."

17 Do you agree with that statement?

18 A. I agree with that statement as it refers to
19 short-term decentralization.

20 Q. And not as refers to what?

21 A. Well, if you read what he continues to say,
22 "As soon as users decide to trust a different set of
23 validators, Ripple no longer controls those users'
24 networks and those users can make that decision at any
25 time."

1 It's strange to describe something as controlled --
2 it's strange to describe me as controlling something
3 when somebody else can eliminate that control at any
4 moment they choose to do so.

5 Q. And no one has chosen -- sorry.

6 Most users of the network have not chosen to do so,
7 right?

8 A. Yes, to my knowledge.

9 Q. Further down, the third bullet point says, in
10 a parenthetical:

11 "To some extent, the value of XRP also hinges on
12 Ripple's good stewardship of the XRP Ledger." Do you
13 agree with that statement?

14 A. I don't today.

15 Q. Back in 2018?

16 A. I might -- I might have then.

17 Q. You don't agree today?

18 A. I don't.

19 Q. Why not?

20 A. Because -- well, two reasons. One is that
21 the term "value" is -- is -- is an ambiguous term that
22 means -- it can mean a number of different things.

23 But if you want to determine it strictly as -- as
24 price, then the evidence seems to show that the price of
25 XRP moves with the cryptocurrency market generally and

1 it doesn't hinge on anything going on inside the XRP
2 ecosystem.

3 Q. Right, and so I'm not -- you know, you can
4 interpret "value" as you like. It doesn't have to be
5 price.

6 Sitting here today, does the value of XRP also
7 hinge on Ripple's good stewardship of the XRP Ledger?

8 A. I -- I don't think so. I don't know.

9 Q. Would you have any hypothesis as to what
10 happened -- what would happen to the value of XRP today
11 if Ripple walked away from the XRP Ledger?

12 A. My hypothesis is that there would probably be
13 a short-term drop just because expectations would be
14 shaken, and then it would probably recover.

15 Q. What expectations?

16 A. People have an expectation that things
17 won't -- that the status -- generally, people expect the
18 status quo not to change, and any change from the status
19 quo is generally bad.

20 Q. When you say, "people," who are these people?

21 A. Just anyone who's been following the space.

22 Q. Why would -- well, how would their
23 expectations change and cause a drop in price?

24 A. Because generally, any change in expectations
25 causes a change in price, unless -- unless it's

1 obviously good. It's just --

2 It's just a market fact that when there's something
3 that sort of disrupts people's expectations, it causes a
4 short-term drop.

5 Q. And so Ripple walking away from the XRP
6 Ledger is not obviously good?

7 A. Right, and unexpected, and so it would create
8 a -- probably a short-term drop.

9 Q. Why is it unexpected?

10 A. It's just not something Ripple's ever done
11 before.

12 Q. But Ripple has said that it hopes to one day
13 sort of walk away?

14 A. Yes.

15 Q. But why isn't it expected?

16 MR. CERESNEY: Objection. You've got to
17 let us object.

18 THE WITNESS: Sorry.

19 (Thereupon, an informal discussion was
20 held off the record.)

21 BY MR. CERESNEY:

22 Q. My question was: Why is it expected --

23 Why isn't it expected if Ripple has stated that
24 it's going to walk away?

25 MR. CERESNEY: And objection to form.

1 THE WITNESS: I guess I was envisioning a
2 hypothetical where Ripple abruptly just sort
3 of stopped, and I don't think people expected
4 that's what would happen.

5 BY MR. TENREIRO:

6 Q. I see.

7 A. If you envision a more gradual reduction,
8 that might be in accord with people's expectation. It
9 might even be positively received.

10 Q. All right. Let's look at Exhibit 13.

11 (Thereupon, an informal discussion was
12 held off the record.)

13 MR. CERESNEY: Why don't we stop?

14 MR. TENREIRO: Yeah, let's stop.

15 THE VIDEOGRAPHER: Going off the record
16 at 1:00.

17 (Recess taken at 1:00 p.m.)

18 (Resumed at 1:49 p.m.)

19 THE VIDEOGRAPHER: We're back on the
20 record at 1:49.

21 (Thereupon, a multi-page document entitled
22 Validator Registry" was introduced as DS Exhibit
23 13 for identification.)

24 BY MR. TENREIRO:

25 Q. Good afternoon, Mr. Schwartz.

1 Can we take a look at Exhibit 13, please? Do you
2 have it?

3 A. Not yet.

4 Q. That's another document from
5 xrpcharts.ripple.com, and the path is "validators."

6 A. Yes, I see this document.

7 Q. What is this?

8 A. It appears to be -- it appears to be a list
9 of validators along with their affiliations and public
10 keys.

11 Q. The public key is the column on the right?

12 A. Yes.

13 Q. That's sort of how you identify a validator?

14 A. Yes.

15 Q. The messages from those validators are signed
16 by their public key?

17 A. Yes.

18 Q. Okay. This is a list of -- of validators or
19 of validators on the UNL, or -- or what do you mean by
20 the "list of validators"?

21 A. I don't really know.

22 It looks like a list of validators that were live
23 on the network at some particular time, but I'm not
24 sure.

25 Q. Do you know why some say "yes" and some say

1 "no"?

2 A. I don't know for sure. There's no column
3 heading.

4 Q. Do you know if the ones that say "yes" are
5 ripples to UNL validators?

6 A. I don't know for sure. I suspect that's what
7 it means, but I don't know.

8 (Thereupon, an informal discussion was
9 held off the record.)

10 BY MR. TENREIRO:

11 Q. Okay. Again, if I wanted to know which of
12 these -- to the extent --

13 To the extent they are on the dUNL, if I wanted to
14 know which of them Ripple has or has had a commercial
15 relationship with, who would I ask?

16 A. I don't know.

17 Q. Not you?

18 A. No.

19 Q. You're not the one who knows that?

20 A. I wouldn't know. Certainly not for all of
21 them.

22 (Pause.)

23 (Thereupon, a five-page Insights article
24 entitled "How We Are Further Decentralizing the
25 XRP Ledger to Bolster Robustness for Enterprise

1 Use" dated 5/11/17 was introduced as DS Exhibit
2 27 for identification.)

3 BY MR. TENREIRO:

4 Q. Let me just show you Exhibit 27. This is an
5 article that I believe was supposed was posted to
6 Ripple's website by Team Ripple.

7 My question is whether you know if it's true that
8 in May of 2017, the XRP Ledger had 25 validator nodes
9 running and that there's a reference to that at the top
10 of the second page.

11 A. I'm sure there must have been more than 25
12 validator nodes running at that time.

13 Q. Is there a distinction -- so this article is
14 incorrect?

15 A. I think it's -- I would say --

16 Yeah, I think it's being imprecise. I would
17 assume -- I suspect they're referring to validators on
18 the UNL, but I don't know.

19 Q. How many did Ripple run at that time?

20 (Pause.)

21 THE WITNESS: Yeah, I don't -- I don't
22 know.

23 BY MR. TENREIRO:

24 Q. Okay, and again, is it fair to say that if
25 there's 25 validators on the dUNL and all 25 adopt the

1 same dUNL as each other, they can move the network along
2 and anybody else does not matter? For their reality, at
3 least?

4 A. Yes.

5 Q. Okay. If there are --

6 If there comes a point where there would be zero
7 Ripple nodes on the --

8 MR. TENREIRO: Sorry. Let's start again.

9 BY MR. TENREIRO:

10 Q. Presently, does Ripple intend to get to a
11 point where it will have zero validator nodes?

12 A. I think we've stated that that's a goal. I
13 don't think that it makes --

14 I don't think there's any significant difference
15 between zero or one, or one or two, but in the general
16 direction, it is to reduce the number.

17 Q. If you get to zero or one or two, would the
18 dUNL list still be curated by Ripple?

19 A. We could still recommend the list if we
20 wanted to, regardless of how many validators we operated
21 that were on that list.

22 Q. You can still put a default list into the
23 program as well, right?

24 A. Yes.

25 Q. Okay. Exhibit 76, please.

1 (An informal discussion was held off the
2 record.)

3 (Thereupon, a four-page Twitter printout
4 entitled "David 'JoelKatz' Schwartz on Twitter"
5 dated December 1, 2020 was introduced as DS
6 Exhibit 76 for identification.)

7 BY MR. TENREIRO:

8 Q. This is a recent tweet. Seems to be December
9 2nd, 2020. Somebody says:

10 "Unrelated question: If nodes, validators, and the
11 community at large got together and we agree that it's
12 better for the community to burn the 50 billion XRP
13 Ripple has in escrows, would that be possible?"

14 You say:

15 "Yes. There would be nothing Ripple could do to
16 stop that from happening. Public blockchains are very
17 democratic. If the majority wants a rules change, there
18 is nothing the minority can do to stop them."

19 Do you see that?

20 A. Yes.

21 Q. Is Ripple taking any steps to prevent the
22 community from burning its 50 billion XRP?

23 A. No.

24 Q. How much is it worth today?

25 A. Last I checked the price, it was roughly a

1 dollar, so -- I mean, if you used the method of just
2 multiplying the last price by the quantity, 50 billion
3 XRP at roughly a dollar is worth approximately 50
4 billion dollars.

5 Q. Opposed to what method?

6 A. Well, the -- another method that you might
7 use is how much money you could actually materialize for
8 it.

9 Q. Right.

10 A. It would have to take place over time.

11 Q. Sure. Fair enough.

12 So Ripple is taking no steps, as we sit here today,
13 to make sure that the community does not decide that
14 it's better for them to burn your XRP?

15 MR. CERESNEY: Objection to form.

16 THE WITNESS: There are no steps we're
17 taking with the -- with the -- for the purpose
18 of achieving that outcome.

19 BY MR. TENREIRO:

20 Q. Well, what steps is Ripple taking to protect
21 its stash of XRP from such an outcome?

22 A. No steps specifically to prevent that
23 outcome.

24 Q. What steps is Ripple taking that could help
25 it prevent that outcome?

1 A. I mean, for example, just defending our
2 reputation -- you know, just avoiding reputational harm,
3 for example.

4 Q. How about exerting influence over the
5 validators?

6 A. That would not be effective.

7 Q. Why not?

8 MR. CERESNEY: Objection. Objection. Go
9 ahead.

10 THE WITNESS: Anyone who is proposing to
11 burn Ripple's escrow would have to make
12 software changes in order to accomplish that.

13 Those software changes could also change
14 the default UNL, change the role of the UNL.
15 There's no additional -- there's no additional
16 step required.

17 It would -- it would still be the same
18 process either way.

19 BY MR. TENREIRO:

20 Q. Does Ripple engage in current efforts to
21 persuade validators not to do those steps?

22 A. I don't believe that's ever come up.

23 Q. Why hasn't it occurred, in your estimation,
24 that the community decides it's better to burn Ripple's
25 50 billion XRP?

1 MR. CERESNEY: Objection to form.

2 THE WITNESS: If -- it just hasn't. It's
3 an extreme, outrageous thing that they
4 don't -- it doesn't need a reason not to
5 happen.

6 BY MR. TENREIRO:

7 Q. What about burning some?

8 A. I think it would be -- I think it would be
9 odd -- it's just a hard thing to propose like -- to
10 propose a sort of irregular trans -- it's just difficult
11 to do that.

12 Q. Over the years, there's been concern -- at
13 least expressed online -- about Ripple's potential
14 dumping of XRP into the market, right?

15 MR. CERESNEY: Objection.

16 BY MR. TENREIRO:

17 Q. That you're aware of?

18 MR. CERESNEY: Objection to form.

19 THE WITNESS: I have heard people express
20 that concern.

21 BY MR. TENREIRO:

22 Q. There's also been concern expressed about
23 overhang on XRP because Ripple holds a lot of it?

24 A. I've heard those concerns.

25 Q. And, in fact, one of the reasons Ripple

1 established the time release was to address some of
2 those concerns, correct?

3 A. Yes.

4 Q. Okay, and isn't it also true that under
5 demand and supply dictating price, Ripple's stash of XRP
6 disappeared, that may be good for the other holders of
7 XRP?

8 MR. CERESNEY: Objection to form.

9 THE WITNESS: Could be either good, bad,
10 or have no effect. There's no way I could
11 predict what the effect would be.

12 BY MR. TENREIRO:

13 Q. What do you think the effect would be?

14 MR. CERESNEY: Objection to form.

15 THE WITNESS: I can -- I can make a
16 strong argument for all three scenarios.

17 BY MR. TENREIRO:

18 Q. Okay, so sitting here today, given -- you
19 know, concerns expressed at times about Ripple's
20 overhang or Ripple potentially dumping XRP, do you have
21 any belief as to why the community hasn't gotten
22 together and just described to burn your 50 billion?

23 MR. CERESNEY: Objection to form.

24 THE WITNESS: I don't think they have had
25 any reason to do anything that drastic.

1 BY MR. TENREIRO:

2 Q. In other words, Ripple hasn't done anything
3 that would make them want to do that? Is that what you
4 mean by "any reason"?

5 MR. GERTZMAN: Objection to form.

6 THE WITNESS: I think that's part of what
7 I meant, but I would go broad -- more broadly
8 and say nothing's happened -- that nothing
9 else has happened.

10 One could imagine external factors.
11 There just -- it just -- there's just never
12 been a circumstance where that seemed like an
13 appropriate remedy.

14 BY MR. TENREIRO:

15 Q. In terms of non-external Ripple factors,
16 would you say Ripple's been a good steward for XRP over
17 the years?

18 MR. CERESNEY: Objection.

19 THE WITNESS: In terms of external,
20 non-Ripple factors?

21 BY MR. TENREIRO:

22 Q. Taking out --

23 A. Oh.

24 Q. Excluding -- excluding.

25 Excluding external, would you say Ripple's been a

1 good steward for XRP over the years?

2 MR. CERESNEY: Objection to form.

3 THE WITNESS: I guess that depends what
4 you mean by "steward."

5 BY MR. TENREIRO:

6 Q. Well, to the extent that --

7 I guess what's not clear about that word, to the
8 extent it's used?

9 MR. CERESNEY: Objection.

10 THE WITNESS: I understand what
11 stewardship means with respect to the XRP
12 Ripple holds.

13 It's hard to understand how that concept
14 would apply broadly to an ecosystem or an
15 asset.

16 BY MR. TENREIRO:

17 Q. Well, let's talk about the stewardship with
18 respect to the XRP that Ripple holds.

19 A. Right.

20 Q. Would you say over the years, Ripple has been
21 a good steward of that XRP?

22 A. I think Ripple has used its XRP responsibly.

23 Q. Okay. Do you think that's benefited XRP
24 holders at large?

25 A. I think it hasn't harmed then.

1 (Thereupon, an informal discussion was
2 held off the record.)

3 MR. TENREIRO: Let's look at Exhibit 82,
4 please.

5 MR. CERESNEY: Hold on.

6 Before you question on this, Jorge, can
7 you move to a different exhibit so we can come
8 back to this?

9 I want to spend a few minutes with the
10 witness on this regarding a privilege issue.

11 MR. TENREIRO: Sure.

12 BY MR. TENREIRO:

13 Q. All right. Does Ripple make decisions on
14 inclusion on the dUNL list based on amendment voting
15 history or expected future voting history?

16 A. I believe we --

17 Not on amendment history, but we have on
18 expectation of involvement in the voting process.

19 Q. The expectation being that they will be
20 involved?

21 A. We would prefer validators that were not
22 indifferent to the voting process.

23 Q. Why?

24 A. Because if validators don't think about their
25 votes, then the voting process doesn't accomplish

1 anything, doesn't measure sentiment.

2 Q. How do you ensure that there's commitment to
3 the voting process?

4 A. I don't know specifically.

5 Q. What involvement do you have in that process?

6 A. I was involved in discussing those criteria
7 and my recollection from those discussions was that we
8 would communicate with whoever at the institution or
9 entity was responsible for maintaining the validator to
10 judge whether they had an interest in following the
11 amendment process.

12 Q. When you say, "we," you mean someone at
13 Ripple?

14 A. Yes.

15 Q. Has Ripple ever communicated with validators
16 about voting strategies?

17 A. I wouldn't characterize any of those
18 communications as a voting strategy. We communicated
19 with individual voters.

20 Q. Okay. Why?

21 A. Sometimes we think amendments are a good
22 idea. Sometimes we don't, and we communicate our views
23 both publicly and to validator operators.

24 Q. To validator operators privately?

25 A. Not to my knowledge.

1 Q. Well, so you mentioned publicly, and you
2 mentioned to validator operators. So how do you -- is
3 it just always public?

4 A. I believe it's always public.

5 Q. Do you know if Ripple's ever communicated
6 with individual nodes to suggest or encourage a
7 particular voting stance?

8 A. The only incident I know of involved us
9 influencing validators to vote "no" on an amendment
10 until such time as it had sufficient time for other
11 people to form a view.

12 Q. Which was that?

13 A. I don't remember which amendment.

14 I'm trying to remember. I don't remember. I don't
15 remember which it was, but -- yeah, I don't recall
16 precisely.

17 Q. Okay. You said Ripple had proposed the
18 Checks Amendment --

19 A. Yes.

20 Q. -- at some point.

21 Why did Ripple change its mind about its stance on
22 the Checks Amendment?

23 A. The amendment turned out to be more
24 complicated and risky than we thought was reasonable for
25 the functionality that it provided, which we didn't

1 think was all that important.

2 Q. Based on what?

3 A. Based on the internal viewpoint of the
4 team -- members of the team who had worked on the
5 amendment.

6 Q. Okay, and when did that view develop first
7 the amendment did not pass?

8 A. Right.

9 Q. And does it stay on or -- if it's not passed
10 or does it expire after two weeks?

11 A. It doesn't expire unless people actually
12 choose to actively renew.

13 Q. And Ripple did not renew?

14 A. No, we didn't.

15 Q. At some point, the vote started switching to
16 "yes"?

17 A. Yes.

18 Q. Did Ripple have any role in switching some of
19 those votes to "yes"?

20 A. My recollection is that our position at the
21 time was that -- that the amendment had not had
22 sufficient testing and that there were serious questions
23 about whether its usefulness exceeded its risk and that
24 we were advising against the amendment.

25 Q. Right, but my question was --

1 Maybe the answer's in there, but I missed it. My
2 question was: Did Ripple have any role in securing
3 "yes" votes for the amendment?

4 A. No. We were trying to secure "no" votes at
5 the time.

6 Q. When you proposed it, did you try secure
7 "yes" votes?

8 A. I don't think we ever got to the point where
9 we were advising validators to vote "yes" on it.

10 My recollection is that our position switched to a
11 "no" stance before it got to the stage where external
12 validators would have been voting on it.

13 MR. TENREIRO: Okay. Do you want to take
14 a break to discuss that exhibit? Because I'm
15 going to move on.

16 MR. CERESNEY: I think we're ...

17 I think we need some time on our end to
18 make inquiries and then talk with the witness
19 about it.

20 MR. TENREIRO: More than just --

21 MR. CERESNEY: Yeah. If you move on, we
22 will come back to it.

23 MR. TENREIRO: Okay. Exhibit 70, please.

24 Let's go off the record for one minute. My
25 laptop is not working.

(Thereupon, an informal discussion was held off the record.)

THE VIDEOGRAPHER: Going off at 2:07.

(Recess taken at 2:07 p.m.)

(Resumed at 2:09 p.m.)

THE VIDEOGRAPHER: Back on at 2:09.

(Thereupon, an e-mail chain with the top e-mail dated 7/6/2020 from Brad Garlinghouse to David Schwartz et al. was introduced as DS Exhibit 70 for identification.)

BY MR. TENREIRO:

Q. All right. So Exhibit 70 is an e-mail from -- well, the bottom part of it --

The principal part is from you to somebody on July 6, 2020. It appears that Mr. Garlinghouse is one of the recipients of your e-mail.

A. Yes.

(Pause.)

BY MR. TENREIRO:

Q. Sorry. At the bottom -- towards the bottom, you say:

"These two events dramatically demonstrate that Ripple's control over the XRP Ledger consists of persuasion and influence and not any ability to unilaterally make arbitrary changes."

1 Do you see that?

2 A. Yes.

3 Q. What did you mean by that, "persuasion and
4 influence," here?

5 A. I meant our ability to make changes over the
6 XRP Ledger consisted of convincing other people that
7 those changes were good ideas, just as anyone else's
8 would be.

9 Q. And does Ripple engage in those efforts
10 today?

11 A. Yeah.

12 Q. Is it known to the public that Ripple engages
13 in those efforts?

14 MR. CERESNEY: Objection --

15 MR. GERTZMAN: Objection to the form.

16 MR. CERESNEY: Yeah, form.

17 THE WITNESS: I believe it's known to the
18 public that Ripple participates in the
19 development process, that some amendments are
20 authored by people who work at Ripple, and
21 Ripple sometimes advises voting "yes" or "no"
22 on those amendments.

23 BY MR. TENREIRO:

24 Q. At the top, it says "As you know, one of the
25 most common objections to the use of XRP and the XRP

1 Ledger is the perceived centralization or control over
2 the ledger by Ripple."

3 Do you see that?

4 A. Yes.

5 Q. Why does Ripple care to respond to these
6 common objections to the use of XRP and the XRP Ledger?

7 MR. CERESNEY: Objection to form.

8 THE WITNESS: We wouldn't want people not
9 to use XRP or the XRP Ledger for reasons that
10 are not factual.

11 BY MR. TENREIRO:

12 Q. Does Ripple want people to use XRP and the
13 XRP Ledger?

14 MR. CERESNEY: Objection to form.

15 THE WITNESS: I would say Ripple wants
16 people to use the XRP Ledger.

17 BY MR. TENREIRO:

18 Q. Not XRP?

19 A. Not necessarily.

20 Q. From your perspective, Ripple's indifferent
21 as to whether people use XRP?

22 MR. CERESNEY: Objection to form.

23 THE WITNESS: It's an extremely nuances
24 point that's hard to put into a "yes" or "no"
25 answer to that question.

1 BY MR. TENREIRO:

2 Q. Well, we can expand. It doesn't have to be
3 "yes" or "no."

4 A. Ripple wants people who use blockchain
5 technologies to get best experiences. Otherwise, there
6 won't exist a market. We wouldn't have customers. We
7 wouldn't have a business.

8 If that means them using XRP, then we would like
9 them to be able to. If that means other assets are
10 better, we would like them to use that.

11 Q. With respect to Ripple's product -- products,
12 whatever they may be, does Ripple care whether there
13 exists a market for XRP?

14 MR. CERESNEY: Objection to form.

15 THE WITNESS: Yes.

16 BY MR. TENREIRO:

17 Q. So Ripple does care?

18 MR. GERTZMAN: Objection to form.

19 THE WITNESS: Sorry. Could you back up?

20 BY MR. TENREIRO:

21 Q. Does Ripple --

22 I asked you whether Ripple cares, but my question
23 now is: Does it care?

24 A. Yes.

25 MR. CERESNEY: Objection to form.

1 BY MR. TENREIRO:

2 Q. Okay, and why does Ripple care for there to
3 be a market for XRP?

4 A. Because ODL works best with XRP because of
5 the lower fees and higher speeds of the XRP Ledger than
6 ODL's.

7 Q. And has Ripple taken steps to make sure that
8 that market, in fact, exists?

9 MR. CERESNEY: Objection to form.

10 THE WITNESS: In ODL corridors.

11 BY MR. TENREIRO:

12 Q. So I'm talking more generally about the XRP
13 markets. Has Ripple taken steps, for example, to be
14 market makers to make a market for XRP?

15 A. To my knowledge, exclusively in corridors
16 that specifically needed that liquidity for a deal.

17 Q. Otherwise, Ripple has engaged market makers
18 to sell its own XRP?

19 A. I believe so.

20 Q. And that's --

21 That wasn't in connection with creating corridor
22 liquidity? Is that your testimony?

23 A. My understanding was that those market makers
24 sold XRP by market making with a bias in favor of
25 selling, and so it does as well -- it does in addition

1 improve liquidity.

2 Q. That wasn't the purpose?

3 A. I -- I couldn't tell you which of those two
4 purposes was dominant or how -- how they connected.

5 Q. At some point, one of the purposes of
6 Ripple's XRP sales was to simply raise revenue; is that
7 right?

8 A. I -- I think so.

9 Q. Just to sort of -- let's look at Exhibit 42,
10 please.

11 (Pause.)

12 MS. FORBES: Would you please repeat the
13 exhibit number?

14 MR. TENREIRO: Exhibit 42. Before we
15 move on, your request that we move on from
16 that exhibit for a moment reminded me that, as
17 I told you before we went on the record this
18 morning -- you know.

19 We're just preserving on the record an
20 objection or rather a reservation of rights to
21 call the witness back to the extent that
22 there's a dispute over the proper assertion of
23 privilege over some documents that we e-mailed
24 last night in addition to our general concerns
25 stated in e-mails back and forth before about

1 the timing and production of documents and the
2 productions that have occurred.

3 MR. CERESNEY: Yeah, and I would say on
4 the record that we would object to any attempt
5 to call Mr. Schwartz back, and we believe our
6 productions have been more than prompt and, in
7 fact, responsive to your requests, and we
8 believe there's a proper privilege assertion
9 over the documents we talked about we e-mailed
10 last night.

11 MR. TENREIRO: Okay, thanks.

12 (Thereupon, an eight-page e-mail dated
13 12/31/17 from [REDACTED]@ripple.com to
14 [REDACTED]@ripple.com et al. was introduced as DS
15 Exhibit 42 for identification.)

16 BY MR. TENREIRO:

17 Q. So on Exhibit 42, just take a moment to look
18 at it. It's an eight-page document that sort of seems
19 to include a Slack -- sort of a printout of a Slack
20 channel?

21 A. Yes.

22 Q. Towards the top, [REDACTED]@Ripple says:

23 "Set the channel's purpose: Discuss the XRP Ledger
24 issue of **Binance** on December 30th, 2017."

25 Do you see that?

1 A. Yes.

2 Q. What was the issue?

3 (Pause.)

4 THE WITNESS: One second.

5 MR. CERESNEY: Take your time.

6 THE WITNESS: It looks like there was

7 some --

8 There was some issue with their -- their

9 integration that is the way **Binance** was using

10 the ledger software.

11 BY MR. TENREIRO:

12 Q. Why was **Binance** calling you about this?

13 A. Probably because we had provided them contact
14 information.

15 Q. Is there anyone else that provides this type
16 of service route changes when they have an issue with
17 the software they are using to interact with the XRP
18 Ledger?

19 MR. CERESNEY: Objection, asked and
20 answered this morning.

21 THE WITNESS: I believe there are.

22 BY MR. TENREIRO:

23 Q. Who?

24 A. The two companies I mentioned earlier, [REDACTED]

25 [REDACTED] and -- [REDACTED]

1 Q. Do you know how often they answered or
2 fielded these sort of questions?

3 A. No, I don't.

4 Q. Well, just in case you ever talked to them?

5 A. I haven't, but they -- they provide this type
6 of support as a business.

7 Q. What relationship, if any, do they have to
8 Ripple?

9 A. I -- I believe the only relationship [REDACTED]
10 [REDACTED] has is their validator's on our dUNL. I
11 believe we've given -- we have given some funding to the
12 other company, whose name I can't recall.

13 Q. Okay. On the next page, [REDACTED] Ripple -- is
14 that you?

15 A. Yes.

16 Q. So page 2, actually. Let's skip ahead.
17 Towards the top, you say:

18 "Also, we need to make charts more reliable. I got
19 about a dozen 'can't find TX on charts' messages during
20 this rally."

21 Do you see that?

22 A. Yes.

23 Q. What is that about? First of all, what does
24 "rally" mean?

25 A. "Rally" means a period of increased

1 transaction volume in the digital currency space,
2 generally.

3 Q. And it doesn't include price increase?

4 A. Can include price increase.

5 Q. What does it mean here?

6 A. I think here, it means increase in volume.

7 Q. Why?

8 A. Because that's when people --

9 Because when the prices are moving up or down or
10 there's volume for any reason, they all result in
11 increased load on infrastructure, and this is from the
12 standpoint of maintaining infrastructure.

13 Q. So making the charts more reliable?

14 A. Yes, exactly.

15 Q. Is that something that still -- that Ripple
16 still endeavors to do today?

17 A. We are one of the providers of those types of
18 charts and, of course, we try to make them as reliable
19 as we can.

20 (Thereupon, an e-mail chain with the top
21 e-mail dated 11/13/18 from Monica Long to [REDACTED]

22 [REDACTED] et al. was introduced as DS

23 Exhibit 44 for identification.)

24 BY MR. TENREIRO:

25 Q. Okay. Let's look at Exhibit 44, please. So

1 this is a two-page email, in part to you.

2 A. Uh-huh.

3 Q. Who is [REDACTED]?

4 A. [REDACTED] was the product manager
5 who worked with the XRP Ledger at the team at Ripple
6 working on the XRP Ledger.

7 Q. Okay. Do you recall this incident from
8 November 2018, where it says:

9 "The XRP Ledger encountered a critical issue an
10 hour ago, when one of the recommended lists (UNL)
11 expired and a new list was published."

12 Whose UNL expired?

13 A. I don't specifically recall.

14 Q. It was -- would it have been Ripple's?

15 A. This was 2018, and I believe we had the only
16 list that I knew of at that time, so I must have -- I
17 would assume it would be ours.

18 Q. So you say:

19 "Unfortunately, this caused several of the
20 validators on the network to desync and stop validating
21 transactions, which has stalled the XRP Ledger from
22 making forward progress.

23 "Keep in mind, this occurs as a safety measure to
24 prevent the network from forking."

25 Do you see that?

1 A. Yes.

2 Q. Is that a feature that Ripple had put into
3 the ledger?

4 A. I think that's a safety feature that predates
5 Ripple's existence.

6 Q. Is that a safety feature that you put into
7 the ledger?

8 A. I believe so.

9 Q. Monica Long responds. Who is Monica Long?

10 A. She probably was head of communications at
11 the time.

12 Q. She says, in part, "Also, please do not reply
13 to other Tweets or other social media posts on the topic
14 right now." Do you see that?

15 A. Yes.

16 Q. Why not? Did you ask her?

17 A. I didn't.

18 Q. Do you know why?

19 A. Only the rationale that she explains in this
20 paragraph.

21 Q. Which is that you just might want it to fly
22 under the radar?

23 A. I think it was more she was working on a
24 statement.

25 Q. I guess my question is earlier, you had

1 said -- you know, Ripple had an interest in there being
2 accurate information in the market; is that right?

3 A. Yes.

4 Q. And what about information that was accurate
5 but Ripple did not like for some reason? What was
6 Ripple's stance with respect to that information?

7 MR. CERESNEY: Objection to form, also
8 misstates this exhibit. That's the
9 implication.

10 THE WITNESS: I -- I don't accept the
11 general statement that anything that's
12 necessarily negative we would not want to have
13 exposure.

14 BY MR. TENREIRO:

15 Q. No, I'm not saying that. I'm asking you if
16 there was something negative.

17 What was Ripple's stance with respect to something
18 negative, if there is not a general answer?

19 A. There is not a general answer.

20 Q. Okay. Well --

21 A. We try to be honest about failings where we
22 think that's the appropriate response.

23 Q. Okay, but this --

24 Is this one where Ripple decided not to call
25 attention to the issue?

1 MR. CERESNEY: Objection to form.

2 THE WITNESS: I think Monica's statement
3 here speaks for itself. She wanted to prepare
4 a response.

5 BY MR. TENREIRO:

6 Q. Did Ripple issue a response to the stalling
7 of the network in 2018, November?

8 A. I don't know.

9 Q. Why would Ripple want to prepare a response?

10 MR. CERESNEY: Objection.

11 MR. GERTZMAN: Objection to form.

12 THE WITNESS: If -- if incorrect
13 information circulated, we would want to be
14 ready with accurate information.

15 BY MR. TENREIRO:

16 Q. Okay. Let's set this aside and look at
17 Exhibit -- one second.

18 (Pause.)

19 (Thereupon, a multi-page printout from
20 Bitcoin Forum entitled "Latest Posts of
21 JoelKatz" dated April 17, 2013 was introduced as
22 DS Exhibit 3 for identification.)

23 BY MR. TENREIRO:

24 Q. Let's look at Exhibit 3, please.

25 A. Is there a particular page?

1 Q. Yes. One second.

2 (Pause.)

3 BY MR. TENREIRO:

4 Q. Exhibit 3, page 5. So these are posts of
5 Joel Katz on Bitcoin Forum. The quote is on page 4. It
6 says:

7 "Is the only reason for it not working as well with
8 BTC is that OpenCoin wouldn't have a stock of XRP to
9 hang out to promote the system if that's the only case?"

10 MR. CERESNEY: Hold on. I don't think
11 he's --

12 THE WITNESS: I don't see it.

13 MR. CERESNEY: It's at the bottom of page
14 4.

15 BY MR. TENREIRO:

16 Q. The very bottom.

17 A. I see it.

18 Q. The quote is at the very bottom.

19 (Pause.)

20 THE WITNESS: Yes.

21 BY MR. TENREIRO:

22 Q. Your response concludes by saying:

23 "XRP funds the development and ensures there's a
24 healthy company standing behind the network."

25 What do you mean by that, "healthy company standing

1 behind the network"?

2 A. I meant at that time --

3 I meant at that time that I hoped that the XRP
4 would allow -- would allow the company at that time,
5 OpenCoin, to continue operating.

6 Q. How would it do that?

7 A. Any -- any number of ways, from -- from --
8 well --

9 Q. What does "funds the development" mean?

10 (Pause.)

11 THE WITNESS: It's hard for me to say
12 today what I would have meant -- you know,
13 nine years ago.

14 BY MR. TENREIRO:

15 Q. As you read it today, what does it mean to
16 you?

17 MR. CERESNEY: Objection.

18 THE WITNESS: I'll -- I'll do that, but I
19 just want to note that these terms have
20 changed meaning so many times and that we know
21 so much information that we know now that we
22 didn't know then. Trying to say -- tell what
23 it means now doesn't bear any relationship to
24 what someone at that time would have
25 understood it or what I intended it to mean.

1 But today, knowing that Ripple has sold
2 XRP, you would think that's what I was
3 referring to today, only because we know that
4 that happened, but nobody at that time would
5 have known that that happened.

6 BY MR. TENREIRO:

7 Q. How else would XRP fund the development of a
8 healthy company rather than by being sold?

9 A. There was no plausible way at that time.

10 Q. Including the selling?

11 A. Yes.

12 Q. What -- what way other than selling would XRP
13 be able to fund the development and assure there's a
14 healthy company?

15 A. I can't tell you today what I meant in 2013.

16 Q. No, I'm not asking about what you meant. I'm
17 asking you back in 2013 -- I understand there was no
18 plausible way.

19 Selling would be one potential way back then. What
20 other potential ways existed back then for XRP to fund
21 the development of the company?

22 MR. CERESNEY: Objection to the
23 characterization, because "I understand there
24 was no plausible way. Selling would be one
25 way," but I thought he was saying there was no

1 plausible way for selling to actually be in
2 the way at the time.

3 MR. TENREIRO: Right. I think he was
4 saying there was no plausible way at that
5 time, no plausible way at all.

6 MR. CERESNEY: Okay.

7 MR. TENREIRO: Correct me if I'm wrong.

8 BY MR. TENREIRO:

9 Q. The selling was something that could you
10 imagine occurring at some point, even though it wasn't
11 plausible at that time; is that fair to say?

12 A. Yes.

13 Q. Even in 2013, you could imagine perhaps one
14 way you might sell?

15 A. Right.

16 Q. What else in 2013 -- you can set aside the
17 document or you can refer to it, if you would like.

18 What else in 2013 would you imagine -- did you
19 imagine -- in what other way did you imagine in 2013
20 that XRP could found the development of the company
21 other than by being sold.

22 A. XRP could be part of the use cases that --
23 that the company would promote to venture capitalists to
24 get venture capital for the company, which was our
25 funding -- our actual funding source at that time.

1 BY MR. TENREIRO:

2 Q. Why would the venture capitalists care about
3 the use cases?

4 A. Because the use cases could potentially
5 deliver revenue from things like marketing fees and
6 transaction fees, and so you don't always have to be a
7 clear model or use case.

8 Q. Let's look at Exhibit 2, real quick.

9 (Pause.)

10 MR. GERTZMAN: Which exhibit?

11 MR. TENREIRO: Two.

12 MR. GERTZMAN: Thank you.

13 (Thereupon, a multi-page printout from
14 Bitcoin Forum entitled "Latest Posts of
15 JoelKatz" dated April 15, 2013 was introduced as
16 DS Exhibit 2 for identification.)

17 BY MR. TENREIRO:

18 Q. This is the first page. This is April 15th,
19 2013?

20 A. Yes.

21 Q. Towards the middle, you say -- first, second,
22 and then you say:

23 "In truth, the rhetoric is actually more believable
24 with OpenCoin having a profit motive. For example, if
25 we had no profit motive to do so, why should people be

1 confident we are actually going to decentralize the
2 system?

3 "Why should they be confident that we'll work as
4 hard as we can to drive adoption so they could feel
5 comfortable putting their own resources into Ripple?
6 Because we have a big stake, there's no reason not to
7 believe us when we say we'll work to make that stake
8 worth more."

9 What is -- what do you mean there, because we --
10 who's "we"?

11 A. That -- the "we" here is OpenCoin.

12 Q. And what -- big stake in what?

13 A. The XRP Ledger.

14 Q. And do you have a --

15 Did you have a big stake in XRP itself at that
16 point?

17 A. I don't believe we did in April 2013.

18 Q. In April of 2013, OpenCoin did not have a big
19 stake in XRP?

20 A. I would have to be check to be sure, but I
21 believe XRP did not have an established value at that
22 time.

23 Q. At the beginning of the response, you talk
24 about "100 billion XRP is all that there will ever be."
25 Do you see that?

1 A. Yes.

2 Q. But your testimony is that when you refer to
3 the "big stake" here, you're not talking about XRP?

4 (Pause.)

5 THE WITNESS: I -- it's not --

6 I don't recall exactly what I meant in
7 2013, but it's not clear to me today that that
8 was what I was referring to.

9 BY MR. TENREIRO:

10 Q. Does Ripple still have a big stake in the XRP
11 Ledger today?

12 A. I think you could -- I think we have a big
13 stake in the XRP Ledger --

14 MR. CERESNEY: Objection to form,
15 actually.

16 THE WITNESS: Yeah, it's ... I could
17 think of ways to understand that where the
18 answer would be "yes" and ways where it would
19 be "no."

20 BY MR. TENREIRO:

21 Q. What are the ways where the answer's "yes"?

22 A. Well, if you think that Ripple's ownership of
23 XRP constitutes a stake in the XRP Ledger, which I
24 don't, but -- otherwise, I don't think -- I think stakes
25 in the XRP Ledger --

1 As I use the term "a stake in the XRP Ledger," I
2 mean the people who use it, who use it for transactions,
3 and Ripple does not do that all that much.

4 Q. Ripple has a high stake in XRP today, right?
5 We've talked about that.

6 A. Ripple's ownership --
7 Ripple has significant holdings with significant
8 notional value.

9 Q. And if the notional value drops, that's bad
10 for Ripple; is that fair?

11 A. Not really.

12 Q. Why not?

13 A. The notional value doesn't really impact
14 Ripple in any way.

15 Q. Does it impact Ripple's ability to monetize
16 its holdings for XRP for more money?

17 A. It could, in the short term.

18 Q. Okay. So you're saying Ripple today does not
19 care if the price of XRP goes down; is that your
20 testimony?

21 A. My testimony is that Ripple is not
22 particularly concerned with the short-term pricing.

23 Q. It's concerned with the long-term price?

24 A. I think there is concern with the long-term
25 price.

1 Q. And Ripple would prefer the long-term price
2 of XRP to go up or go down?

3 A. I mean, if Ripple had a choice, Ripple would
4 prefer the long-term price to go up.

5 Q. With a stake in the XRP Ledger, does Ripple
6 have a large stake in the XRP Ledger today?

7 MR. GERTZMAN: Objection to form.

8 THE WITNESS: Yeah, my -- if -- I
9 hesitate to give a "yes" or "no" answer, and I
10 don't want to just repeat what I said.

11 I would argue the stake and the XRP
12 Ledger comes from the people who use it to
13 transact and Ripple doesn't do that.

14 BY MR. TENREIRO:

15 Q. Ripple -- if it did not have its XRP, what
16 source of revenue would it have?

17 MR. CERESNEY: Objection, form.

18 THE WITNESS: Well, the same sources of
19 revenue it has with -- with its the stake --
20 with its XRP, except the ability to sell the
21 XRP or use the XRP to incentivize partners.

22 BY MR. TENREIRO:

23 Q. So the better question would have been what
24 other non-XRP revenue sources does Ripple have today?

25 A. Things like licensing fees, transaction fees,

1 and mostly others -- many speculative ones that we have
2 not explored yet.

3 Q. Let's not speculate now, but just --

4 The ones you have today are licensing fees, you
5 said?

6 A. Yes.

7 Q. And that's -- that's over software?

8 A. Yes.

9 Q. Software that runs using the XRP Ledger?

10 A. Well, could -- could either or not be.
11 RippleNet software, for example, doesn't use the XRP
12 Ledger.

13 Q. What is Ripple's revenue from licensing fees
14 of that software today?

15 A. One of the actual revenue numbers? I don't
16 know those.

17 Q. How significant are they compared to -- you
18 know, Ripple's XRP sales revenue?

19 A. They are significantly smaller.

20 Q. Okay. So if Ripple doesn't have XRP and
21 doesn't have -- you know, any software that operates on
22 the XRP Ledger, what will be left of Ripple today, no
23 hypothetical?

24 MR. CERESNEY: Objection, form.

25 THE WITNESS: The RippleNet business,

1 Ripple's stake in MoneyGram, Ripple's
2 investment in other cryptocurrency companies,
3 and so on.

4 BY MR. TENREIRO:

5 Q. So the RippleNet is its currency?

6 A. Well, if you imagine that we didn't have the
7 XRP, we could -- xRapid could end up using -- could
8 attempt to make xRapid work using other cryptocurrencies
9 or moving different directions.

10 Q. So in terms of revenues that would come in
11 the door tomorrow, how much would you estimate would
12 come in?

13 MR. CERESNEY: Objection.

14 THE WITNESS: It would be small. We have
15 not built the company that way.

16 BY MR. TENREIRO:

17 Q. So the company's being built around the
18 revenues from XRP sales, in part; is that correct?

19 MR. CERESNEY: Objection to form.

20 THE WITNESS: I would say the company's
21 been built around future revenue sources that
22 we have not discovered yet.

23 But the sales of XRP has been a funding
24 source to permit us to pursue those future
25 models.

1 BY MR. TENREIRO:

2 Q. Right, and so -- but the -- you know.

3 You haven't discovered some things, but so today,
4 the company's ability to keep the lights on, what
5 revenues from XRP sales is one source, correct?

6 A. Yes.

7 Q. And some licensing fees from some software
8 that operates with a ledger such as ODL, right?

9 A. Uh-huh, yes.

10 Q. And some licensing fees with respect to
11 perhaps other software that does not operate on the XRP
12 Ledger?

13 A. Yes.

14 Q. So if I remove the XRP and the ones that
15 operate on the XRP Ledger, what revenue is left for
16 Ripple today?

17 A. Venture capital investments and then there's
18 RippleNet revenues that are not connected to the XRP
19 Ledger.

20 Q. How much is that number again?

21 A. I don't know, but it's -- I don't know.

22 Q. Is it in the hundreds of millions?

23 A. No.

24 Q. Okay. The exhibit -- the next page says --
25 you're answering some other post, and you say:

1 "I hope not. We don't want that kind of control.
2 It doesn't benefit us in any way, and it will decrease
3 adoption.

4 "Our financial interest is in seeing the value of
5 XRP go up and the primary way for us to achieve that is
6 broad adoption of Ripple as a payment system." Do you
7 see that?

8 A. I actually don't see that. Is that page 2?

9 Q. Yes, at the top.

10 MR. CERESNEY: It starts with "I hope
11 not."

12 THE WITNESS: Oh, I see it now. Can you
13 give me just one second to review what I am
14 responding to?

15 MR. TENREIRO: Yes.

16 (Pause.)

17 THE WITNESS: Yes.

18 BY MR. TENREIRO:

19 Q. So there, is it fair to say you are tying
20 Ripple's financial interest to the value of XRP going
21 up?

22 A. Yes.

23 Q. Does "value" refer to anything other than
24 price there?

25 A. I believe it does.

1 Q. What does it refer to?

2 A. Utility.

3 Q. Does it refer to both utility and price or
4 just utility?

5 A. It's not -- it's not clear from context. It
6 could refer to either or both of those things.

7 Q. So your -- your statement --

8 Your testimony is that your statement here can be
9 read as "Our financial interest is that the utility of
10 XRP go up, and the primary way for us to achieve that is
11 broad adoption of Ripple as a payment system"?

12 A. Yes.

13 (Pause.)

14 BY MR. TENREIRO:

15 Q. Okay. So it's not clear to you today whether
16 you referred to utility and price or which combination;
17 is that right?

18 A. It's very hard for me today to think back to
19 what my focus would have been at a particular date in
20 2013, responding to a particular question.

21 Q. Okay.

22 (Pause.)

23 BY MR. TENREIRO:

24 Q. All right. Let's move on from this one.
25 Let's look at Exhibit 5, please.

1 Actually, before you look at one, just real quick,
2 if you can just look at that page on Exhibit 2 again --

3 A. Uh-huh.

4 Q. -- where you say that "Ripple's incentive" --
5 it's Exhibit 2, page 2. "Ripple's incentive" -- sorry.

6 "Ripple's financial interest is in seeing the value
7 of XRP go up, and the primary way for us to achieve that
8 is broad adoption of Ripple as a payment system."

9 Is it still true today that its relationship's
10 financial interest is in seeing the value of XRP go up?

11 A. I am less confident in that today than I
12 was -- than I believe I was back then.

13 Q. And why is that?

14 A. Because there's -- because there's less of a
15 demonstrated connection between the utility of XRP and
16 Ripple's financial interest.

17 Q. How so?

18 A. I would have expected back in 2013 to see
19 those things move in tandem, and I have not.

20 Q. You're talking about the price, now?

21 A. I am talking about movement between Ripple's
22 financial interest and the value of the XRP.

23 Q. So it's not necessarily clear to you that
24 it's in Ripple's financial interest for Ripple to
25 achieve broad adoption of the Ripple Ledger as a payment

1 system?

2 A. Yes.

3 Q. So why is Ripple -- is Ripple making efforts
4 to achieve that adoption today?

5 MR. CERESNEY: Objection.

6 THE WITNESS: Minimally. I can't say no,
7 but it's not a primary objective.

8 BY MR. TENREIRO:

9 Q. What is the primary objective of Ripple
10 today?

11 A. A build-out of RippleNet.

12 Q. Meaning xCurrent?

13 A. Yes.

14 Q. Are you talking about xCurrent or xRapid?

15 A. Both, but -- currently, the focus has been on
16 xRapid, but xRapid -- you know, doesn't work without
17 xCurrent.

18 Q. Okay. Fair enough, and xRapid in part relies
19 on XRP as a bridge for the transactions, right?

20 A. Right, but it doesn't rely on the XRP
21 Ledger's functionality other than the movement in the
22 XRP, which it already had. You can't really improve
23 that.

24 Q. You mean the XRP Ledger already had the
25 movement of the XRP as the functionality?

1 A. Right.

2 Q. So Ripple's focus today is not with respect
3 to the XRP Ledger? It's with respect to the market for
4 XRP?

5 A. I would say the majority of Ripple's focus
6 today is with respect to the xRapid product which
7 requires liquidity, and it requires the XRP Ledger to
8 move XRP, but it doesn't require utility beyond that.

9 Q. So liquidity and the XRP market vis-a-vis the
10 tranches on the corridors?

11 A. Correct, yes.

12 Q. So Mexican peso, XRP, U.S. dollar, XRP, for
13 example?

14 A. The product won't work.

15 Q. Sorry?

16 A. The product won't work without that
17 liquidity.

18 Q. So your testimony is that Ripple's efforts
19 today are focusing on ensuring liquidity on the tranches
20 of ODL corridors, essentially?

21 A. I would say that's a big -- that's a major
22 focus.

23 Q. Is it the major focus?

24 A. No, I would characterize the major focus as
25 growing RippleNet, which means xCurrent and today mostly

1 around xRapid.

2 Q. Okay. What other things does Ripple do today
3 to ensure that the ODL product grows?

4 A. We look for partners. ODL partners use
5 [inaudible] directly. Companies will make the last mile
6 in the payments, develop the software, and so on.

7 Q. Companies that make the last mile on the
8 payments, like market makers?

9 A. No. The "last mile" is the delivery of the
10 fiat to the final recipient.

11 Q. So what types of companies are those?

12 A. Either exchanges or payment providers.

13 Q. And does -- what is the licensing fee for the
14 xRapid software?

15 A. I don't know.

16 Q. Is it monthly or is it one time?

17 A. I don't -- I don't know.

18 Q. And how --

19 Again, what's the order of magnitude of revenue
20 that Ripple's derived from that?

21 A. I don't know.

22 Q. Does Ripple charge -- let's say MoneyGram --
23 MoneyGram's not using it right now; fair?

24 A. Yes.

25 Q. When they were, did Ripple charge MoneyGram

1 like a per-transaction fee or ...

2 A. I don't know the commercial details of that
3 particular arrangement.

4 Q. Does Ripple charge any customer that's on the
5 xRapid platform for transaction fees?

6 A. I don't know.

7 Q. Ripple, in fact, pays some of these
8 incentives to use the xRapid platform, right?

9 A. I know customers who receive a variety of
10 different incentives.

11 Q. So I am trying to understand what benefits
12 come from Ripple. Does Ripple make money -- you know.

13 When you add and subtract payments that it makes
14 and fees licensing fees it might receive or other per
15 transaction fees to the extent they exist, does Ripple
16 make money from that product?

17 A. I don't know what that final number would be.

18 Q. And who would know?

19 A. It would be on our financial statements and
20 people who prepare those statements would know.

21 Q. Okay. Ripple --

22 In the ODL sort of flow, there's a purchase -- one
23 of the steps is there's a purchase of XRP for U.S.
24 dollars and then there's a sale of XRP for Mexican
25 pesos; is that right?

1 A. In the USD, that makes sense. Yes.

2 Q. And other than perhaps changes in the
3 changing rates and changes in the amount of time it
4 takes, it's about the same amount of XRP that comes in
5 and out of the system, right?

6 A. Typically, yes.

7 Q. Does Ripple sell its XRP for the purpose of
8 the ODL platform?

9 A. I'm not sure.

10 Q. Okay. So now we have Exhibit -- which one
11 did I say, Exhibit 5? Or four? Exhibit 5?

12

13 (Thereupon, a multi-page printout from
14 Bitcoin Forum entitled "Latest Posts of
15 JoelKatz" dated May 13, 2013 was introduced as
16 DS Exhibit 5 for identification.)

17 BY MR. TENREIRO:

18 Q. All right. These are posts -- we'll still
19 back in 2013 at the bottom of page 3, please.

20 (Pause.)

21 THE WITNESS: Yes.

22 BY MR. TENREIRO:

23 Q. It says:

24 "As a corporation, we are legally obligated to
25 maximize shareholder value." Do you see that?

1 A. Yes.

2 Q. What shareholders are you referring to?

3 A. Ripple's shareholders.

4 Q. Who are they back then?

5 A. In 2013? Myself, Chris Larsen, [REDACTED]
6 [REDACTED], some of the early investors. I don't know if
7 there would be C firms at that time.

8 Q. I'm sorry, who?

9 A. I don't know if there would be C firms that
10 invested. I think by 2013, I think at least [inaudible]
11 [REDACTED] and [REDACTED] had invested, but I
12 couldn't -- I can't confirm the exact timeline.

13 Q. Is Ripple still legally obligated to maximize
14 shareholder value today?

15 A. Yes.

16 Q. Then you say:

17 "With our current business model, that means acting
18 to increase the value and liquidity of XRP."

19 What was the current business model?

20 A. At 2013, there really wasn't one. The --
21 I mean, I guess it was directly to increase the
22 value and liquidity of XRP.

23 Q. But not necessarily how?

24 A. Yeah, I hate to call it a business model.

25 Q. You wanted that to happen, not sure exactly

1 how it was going to happen?

2 A. Right.

3 Q. And when you say, "value and liquidity,"

4 "value" refers to price or something else?

5 A. I think -- well, you can't increase the value
6 when there is no value. It refers here to utility.

7 Q. Okay. The next sentence says:

8 "We believe this will happen if the Ripple network
9 is widely adopted as a payment system. We are pursuing
10 multiple avenues at once. One would expect increased
11 demand to increase price."

12 Are you referring there to the idea that if there's
13 increased utility, there might be increased demand,
14 therefore an increase in price?

15 A. Well, I just have to clarify that there was
16 no price, so here increase price goes from not having a
17 price to having a price.

18 Q. But does increase price mean anything other
19 than increase in price from zero to --

20 A. It means from there not being a price to
21 there being a price.

22 Q. That's still an increase?

23 A. Yeah, from not having a number to having a
24 number is not necessarily an increase, but that's why I
25 hesitate to characterize that -- but I did use that word

1 at the time.

2 Q. And does Ripple's current business model
3 still include Ripple acting to increase the value of
4 liquidity of XRP?

5 A. I think Ripple still acts to increase the
6 you'll of XRP and we act to increase the liquidity in
7 ODL corridors, so to that extent this is still true, but
8 obviously, Ripple's pursuing other models in addition to
9 that now, and that's not primary as we discussed before.

10 Q. The primary model remains active to increase
11 value and liquidity of XRP? And now, you're saying but
12 the liquidity only in the ODL corridors?

13 A. Right, and I would say increasing the value
14 of XRP isn't really a Ripple business model.

15 It's still something we're doing, but I hesitate to
16 describe it as a "business model," because it hasn't
17 demonstrated an ability to produce revenue.

18 Q. Do you have an understanding as to why?

19 A. I'm not an economist, but I know from
20 observation that cryptocurrency prices seem to track
21 each other. They don't seem to correlate as you might
22 expect them to, even with supply and demand for a
23 particular cryptocurrency or the utility or the projects
24 going on. The correlation just doesn't appear to be
25 there.

1 Q. But this is just from your own sort of lay
2 observation?

3 A. Well, I know that other people have made
4 those same observations as well.

5 Q. What people?

6 A. I mean, I've seen that -- that viewpoint
7 expressed -- you know, in the literature.

8 Q. In the economic literature?

9 A. No, in the cryptocurrency space.

10 Q. Got it. Okay. Let's look at Exhibit 7.

11 (Thereupon, an informal discussion was
12 held off the record.)

13 THE VIDEOGRAPHER: Going off the record
14 at 2:50.

15 (Recess taken at 2:50 p.m.)

16 (Resumed at 3:06 p.m.)

17 THE VIDEOGRAPHER: Back on the record at
18 3:06.

19 MR. TENREIRO: Okay.

20 (Thereupon, a one-page e-mail dated
21 6/10/2013 from David Schwartz to [REDACTED]
22 was introduced as DS Exhibit 7 for
23 identification.)

24 BY MR. TENREIRO:

25 Q. Mr. Schwartz, before we went off the

1 record -- you know, you mentioned your observation as a
2 layperson and also reading in literature that there
3 doesn't seem to be a correlation, as one might expect,
4 even with supply and demand for cryptocurrency based on
5 the utility of the projects going on.

6 Do you recall generally this conversation we just
7 had a minute ago?

8 A. Yes.

9 Q. Okay. At what point in time did you come to
10 that conclusion or that belief, at least?

11 A. I don't think there was a particular time
12 where there was a dramatic shift. I think it was a
13 gradual shift over time.

14 Q. Could you pinpoint when it began?

15 A. I would say probably late 2014.

16 Q. In late 2014, you began to believe that there
17 might be or you might maybe have begun to wonder whether
18 there was any correlation between utility and demand?

19 A. Between utility and price?

20 Q. Between utility and price, right; and is that
21 the same time that Ripple came to develop that view or
22 is that just you --

23 A. I don't know that Ripple had that view.

24 Q. Does Ripple have that view today, as far as
25 you know?

1 MR. CERESNEY: Objection to form, using
2 the term "Ripple."

3 BY MR. TENREIRO:

4 Q. Ripple the company, just to be clear?

5 MR. CERESNEY: I don't know who that is,
6 but okay.

7 THE WITNESS: Yeah, there are people at
8 the company who have expressed that view.

9 BY MR. TENREIRO:

10 Q. Like who?

11 A. I can't recall specific conversations with
12 specific people, but we have discussed -- you know,
13 whether there was evidence for that kind of correlation.

14 Q. Do you know whether Ripple buys XRP in the
15 market or has bought XRP in the market?

16 A. I -- I believe there are two incidents where
17 we did.

18 Q. And for what purpose?

19 A. One incident was involving a family member of
20 Jed's who had sold XRP in violation of an agreement, and
21 my understanding was that we bought that XRP back to
22 sort of undo that, and I think there was one connection
23 where we -- where we bought XRP because an ODL tran- --
24 because an ODL flow resulted in a net sale.

25 Q. In a net sale?

1 A. Yes.

2 Q. Why would you want to buy the XRP that
3 resulted in a net sale?

4 A. Again, to cancel that transaction out from
5 the market.

6 Q. Why?

7 A. So that we would not have an undue impact on
8 the market.

9 Q. Undue impact in what direction?

10 A. In any direction.

11 Q. And was that a concern -- the undue impact in
12 any direction also a concern with regard to Ripple's
13 programmatic sales?

14 MR. GERTZMAN: Objection to the form.

15 THE WITNESS: I'm not sure.

16 MR. TENREIRO: Okay. Did I give him
17 seven? Seven was what we were about to do?
18 Okay. Let's do Exhibit 7.

19 (Pause.)

20 BY MR. TENREIRO:

21 Q. So this is an e-mail to you June of 2013 --

22 A. Uh-huh, yes.

23 Q. -- and you're looking for an economist here?

24 A. Yes.

25 Q. And why were you looking for an economist?

1 Can you explain in your own words?

2 A. Yes. I believe that some of the principles
3 of economics and the types of reasoning that would be
4 familiar to economists might have some relevance to the
5 distribution and use of a digital asset.

6 Q. And are you talking here about the
7 distribution and use of XRP?

8 A. Yes.

9 Q. Then you say, at the bottom:

10 "A big issue we have is that we basically need to
11 set monetary policy and the way we give away and sell
12 XRP."

13 Do you see that?

14 A. Yes.

15 Q. What do you mean by "monetary policy"?

16 A. I put it in quotes because I didn't mean the
17 exact sort of "central bank" understanding of monetary
18 policy.

19 What I meant was something that might have some of
20 the same economic principles as monetary -- someone who
21 was familiar with monetary policy might be able to
22 translate those skills to this particular problem.

23 Q. Which principles of monetary policy?

24 A. I don't know what the principles of monetary
25 policy are.

1 Q. Well, which ones did you mean when you wrote
2 that? There are like controlling inflation or ...

3 A. I think -- I think what I was thinking about
4 is the rate at which XRP is introduced into circulation.

5 Q. And why were you thinking about that?

6 A. Because we didn't know -- we didn't know how
7 to do that. That was a problem we faced that we didn't
8 have a solution at that time.

9 Q. Who did you hire as a result of this, if
10 anyone?

11 A. No one.

12 Q. You never hired an economist?

13 A. Not until very recently.

14 Q. So this didn't lead to a lead or anything?

15 A. No, it did not.

16 Q. Okay. Currently -- do you currently have a
17 plan in terms of how Ripple handles giving away and/or
18 selling XRP?

19 MR. GERTZMAN: Objection to the form.

20 THE WITNESS: Ripple has a strategy to
21 put its XRP in circulation that it's executed
22 over time and the policy's changed.

23 BY MR. TENREIRO:

24 Q. What is it now?

25 MR. CERESNEY: Objection to form.

1 THE WITNESS: Now, it's programmatic
2 sales, sales to ODL partners, used for
3 investment, incentivizing partners, those
4 strategies.

5 BY MR. TENREIRO:

6 Q. Is Ripple still engaging in pragmatic sales
7 today?

8 A. I don't know.

9 Q. Let's look at Exhibit 21.

10 (An informal discussion was held off the
11 record.)

12 (Thereupon, a four-page Twitter printout
13 dated 5/5/2017 was introduced as DS Exhibit 21
14 for identification.)

15 THE WITNESS: Thank you.

16 BY MR. TENREIRO:

17 Q. Before we look at this one, when you were --
18 when we were discussing earlier your view about Ripple's
19 legal obligation to increase shareholder value, when you
20 were using the word "value" there, were you meaning
21 utility, price, or something else?

22 MR. CERESNEY: I'm going to object.
23 Form.

24 MR. TENREIRO: Okay.

25 THE WITNESS: I think when I speak about

1 shareholder value, mine the value that
2 shareholders get from their ownership in
3 Ripple, which is predominantly the actual
4 value they can get from their shares, but also
5 includes things like advancing technology
6 generally, their interests in things like a
7 better planet and so on.

8 BY MR. TENREIRO:

9 Q. So they are sort of personal returns, if you
10 will?

11 A. Yes, exactly. How their advances -- how
12 their ownership in Ripple advances their interests.

13 Q. Some sort of ...

14 Okay, but -- some sort of like happiness index, I
15 guess?

16 A. Yeah, yeah.

17 Q. Personal satisfaction?

18 A. Yeah.

19 Q. Primarily the actual value that they could
20 get, meaning what they can -- how much money they could
21 get from their interests or their shares, rather?

22 A. There's definitely a financial component.

23 Q. Okay.

24 A. I just don't want to imply that Ripple is
25 obligated to do anything that makes the shareholders

1 money.

2 Q. Fair enough. Is Ripple's legal obligation to
3 maximize -- where does Ripple's --

4 I know you're not a lawyer, but to the extent you
5 talk about -- you know, "As a corporation, we're legally
6 obligated to maximize shareholder value," from what
7 principle of law does Ripple's obligation to maximize
8 someone's happiness index arise?

9 MR. GERTZMAN: Objection to form.

10 MR. CERESNEY: Objection.

11 THE WITNESS: I'm not a lawyer, but my
12 understanding is a company has an obligation
13 like a fiduciary obligation to maximize the
14 value that shareholders get from their
15 ownership.

16 But that doesn't translate necessarily
17 having to produce them as many dollars as
18 possible.

19 (Thereupon, an informal discussion was
20 held off the record.)

21 BY MR. TENREIRO:

22 Q. All right. The tweet, May 5th, 2017, "XRP
23 hits 10 cents." You had some champagne ready for that?

24 A. Yes.

25 Q. Why?

1 A. Much as people celebrate birthdays and round
2 numbers, people in the cryptocurrency community
3 frequently celebrate round number prices.

4 Q. And which others did you celebrate?

5 A. I celebrated Bitcoin hitting \$100. I
6 celebrated Bitcoin hitting a thousand dollars. I
7 celebrated Bitcoin hitting \$2500, hitting \$10,000, I
8 celebrated XRP hitting 25 cents. I celebrated Ethereum
9 hitting a dollar, and I'm probably missing a few.

10 Q. Were those always champagne bottles?

11 A. Some of them were with huge parties. Some of
12 them were just with Champagne bottles.

13 Q. So for XRP it was 10 cents and 25 cents?

14 A. Yes.

15 Q. Not others?

16 A. No.

17 Q. Why do people in the crypto space celebrate
18 these milestones?

19 MR. GERTZMAN: Objection.

20 BY MR. TENREIRO:

21 Q. Why did you. Let's just say, "Why you?"

22 A. Because they seemed so impossible at the
23 time -- at -- at previous times.

24 Q. Did you hold XRP at the time when it hit 10
25 cents?

1 A. Yes.

2 Q. Did you sell any after?

3 MR. CERESNEY: Objection to timing.

4 MR. CERESNEY: Objection to timing?

5 MR. CERESNEY: When you say, "After" --

6 BY MR. TENREIRO:

7 Q. Any time after?

8 A. Yes, certainly.

9 Q. Any time within the next -- you know, say few
10 weeks after May 2017?

11 A. I'm not really sure.

12 Q. Did you believe at this time that the efforts
13 of Ripple's team had had anything to do with the price
14 of XRP going up?

15 A. I don't know whether I did at that time.

16 Q. Let's look at Exhibit 32.

17 (Thereupon, a nine-page printout from
18 Bitcoin Forum entitled XRP] Ripple Speculation"
19 was introduced as DS Exhibit 32 for
20 identification.)

21 BY MR. TENREIRO:

22 Q. Bitcoin Forum, nine pages, May 2017, so the
23 same month as the tweets. I'm going to ask about the
24 first page only.

25 There appears to be a "Joel Katz" at the bottom.

1 Who designs these avatars for you, by the way?

2 A. This particular avatar came from an article I
3 wrote for the very first Bitcoin magazine called Bitcoin
4 Magazine, and they produced one of these for every
5 contributor.

6 Q. Okay, so this -- this post says -- I don't
7 want to read all of it into the record. There's some --
8 some personal matters here. You conclude by saying:

9 "Well, I can see I can't prove that this increase
10 in price isn't a bubble or isn't the result of some pump
11 and dump attempt. To me, it feels like recognition for
12 the efforts the team has put in all these years."

13 Do you see that?

14 A. Yes.

15 Q. Does that refresh your memory that at the
16 time of the celebration for the 10 cents you felt like
17 the increase of the price to 10 cents had been, at least
18 in part, as a recognition for the effort that your team
19 had put into Ripple or XRP overall those years?

20 A. I think I --

21 MR. GERTZMAN: Objection.

22 THE WITNESS: I think I felt that to some
23 extent.

24 BY MR. TENREIRO:

25 Q. Okay, and you are saying today you don't feel

1 that anymore?

2 A. Yeah, I -- I think it's harder -- it's harder
3 to -- like even as I sit here, I can't prove it.

4 I think it's harder to defend it today, given the
5 subsequent motions of the price and their lack of
6 correlation to anything going on to anything in the
7 individual product.

8 Q. And I think you've talked about the
9 correlation to cryptocurrencies generally?

10 A. Yes.

11 Q. Does the correlation, in your mind --

12 In your mind -- this is just your understanding. I
13 know you're not an economist.

14 Does the correlation between the price of XRP and
15 the price of other cryptocurrencies preclude there being
16 sort of an effect on XRP's price based on efforts of
17 Ripple?

18 A. The correlation alone is not sufficient to
19 demonstrate that there are no effects.

20 Q. What else would you need?

21 A. Well, the correlation demonstrates that it's
22 not the dominant effect, but in order to rule out
23 smaller facts, you would have to analyze events --

24 Well, you would have to analyze specifically the
25 time of specific events and the time of specific price

1 changes to see if you could correlate those smaller
2 changes.

3 Q. Wouldn't you also have to analyze whether the
4 event is actually meaningful?

5 MR. CERESNEY: Objection.

6 MR. GERTZMAN: Objection.

7 THE WITNESS: You would only want to look
8 at events that you would at least expect to
9 have some impact.

10 BY MR. TENREIRO:

11 Q. Right.

12 A. If your theory was that there was a causative
13 effect, take the facts you think there would be an
14 effect on and see if you could find anything.

15 Q. Okay. Let's look at 33. I'm going back in
16 time just a little bit, a month. This is an April 2017
17 e-mail chain. All of them appear to be from
18 Mr. Garlinghouse.

19 You're copied and, I think, referred to as a board
20 member, so my first question is: You were a board
21 member of Ripple, correct?

22 A. Yes.

23 Q. And why did you cease being a board member?

24 A. We had added several new investors and we
25 didn't want --

1 They wanted board representation and we didn't want
2 to increase the size of the board further, and so I
3 agreed to resign to allow one of those new board members
4 to take that place.

5 Q. Were you okay with that?

6 A. Yeah.

7 Q. Okay, so the first page --

8 On the first page, the e-mail on Sunday, April 9th,
9 Mr. Garlinghouse says:

10 "Before I dive into some highlights and lowlights,
11 I think we will all agree that the most significant Q1
12 development came at the end of the quarter in the form
13 of a dramatic spike in XRP price and market activity."

14 Then, he concludes by saying:

15 "It's a game-changer for us on a bunch of levels."

16 Do you understand what he meant by that? Why was
17 it a game-changer with a dramatic spike in XRP price and
18 market activity?

19 A. I don't know what specifically he was
20 referring to, but I can reason out why he would have
21 thought that that was significant.

22 Q. Go ahead.

23 A. The price and market activity of XRP affects
24 people's ability to use it for ODL as an intermediary
25 asset and so on.

1 Q. Well, you didn't have ODL in 2017, right.

2 A. I -- in 2017? Well, we -- we always imagined
3 that the goal of RippleNet would be to allow XRP
4 settlement. We didn't have a way to do it at the time,
5 and in fact, one of the things I think would have been a
6 significant thing here would have allowed that corner to
7 be turned.

8 Q. Right. So in other words, up until the
9 moment where you turned the corner, Ripple always wanted
10 there to be an increase in price to market activity for
11 XRP so that this product could exist?

12 A. Well, it's --

13 MR. CERESNEY: Objection to form.

14 THE WITNESS: It's liquidity that's
15 critical.

16 BY MR. TENREIRO:

17 Q. Are you talking about where it says
18 "speculative and market traded volume builds up
19 liquidity? Or what do you mean by the "liquidity"?

20 A. I --

21 MR. GERTZMAN: Objection to form.

22 THE WITNESS: Yeah, he does say that
23 speculative and market traded volume builds up
24 liquidity.
25

1 BY MR. TENREIRO:

2 Q. Okay, so the liquidity is what's critical for
3 ODL to function?

4 A. Yeah, that's what I believe he's talking
5 about here, to the extent I can tell just from what he
6 wrote what he meant.

7 Q. Well, first, he talks about the spike in XRP
8 price and says, "It's a game-changer for us."

9 A. Right.

10 Q. Then he says, "On an operating level, for XRP
11 to serve the purpose of lowering liquidity cost for
12 payments, it needs to keep liquidity across fiat
13 currency pairs."

14 Do you see that?

15 A. Yes.

16 Q. So it appears to be a separate point?

17 A. I think that's -- as I read it, the next two
18 paragraphs are two of the ways in which he thinks it's a
19 game-changer.

20 Q. Okay.

21 A. But again, that's just how I read it.

22 I can't tell you what Garlinghouse meant, but as I
23 read this, he says it's a game-changer and then he
24 explains how it's a game-changer on two different
25 levels.

1 Q. Right. One is an operating level? The other
2 is a more strategic level?

3 A. Yes. Right.

4 Q. Sorry.

5 A. Sorry.

6 Q. Do you agree that speculative and market
7 traded volume builds the liquidity of the XRP market?

8 A. Yes.

9 Q. Is that true today?

10 A. Yes.

11 Q. Okay. If there's more speculative trading on
12 the XRP/MXN pair, is that good for Ripple's -- for
13 Ripple's desires with respect to ODL?

14 A. That's good for ODL, because that generally
15 would be expected, there to be more liquidity.

16 Q. So is that good for Ripple, though, to the
17 extent Ripple cares about ODL?

18 A. Yes.

19 Q. If there was more speculative trading on the
20 dollar cross, I think is the expression, does that
21 increase the liquidity of that cross as well?

22 A. Not in a way that's relevant for ODL.

23 Q. Because?

24 A. There's always sufficient liquidity in that
25 corridor.

1 Q. Okay. Below, you say -- well, he says, not
2 you:

3 "On a more strategic level, holding two billion of
4 XRP, based upon today's price, presents opportunities
5 for things strategically about our capital structure and
6 funding strategy."

7 A. Yeah.

8 Q. "We will spend more time on this at our next
9 boards meeting."

10 Do you see that?

11 A. Yes.

12 Q. Did you spend more time on it?

13 A. I believe so.

14 Q. Okay, and what did you discuss?

15 A. I think it's hard for me to know exactly
16 which board meeting came after this exact message and
17 what specifically he was referring to.

18 But at that time, there was concern by the board
19 that -- that Ripple's revenue was coming from a source
20 outside its control.

21 Q. Which was what?

22 A. Programmatic sales of XRP or other -- other
23 types of monetization based on XRP being -- you know,
24 the company disposing of the XRP at a price.

25 Q. So the part that was out of the control of

1 the company was a price at which XRP was disposed, not
2 the fact of the sale, right?

3 A. Right. The company could control the rate at
4 which XRP was sold but couldn't control the price.

5 Q. So it couldn't control how much revenue it
6 would get because it was uncertain what the price would
7 be tomorrow?

8 MR. CERESNEY: Objection.

9 THE WITNESS: I'll phrase the concern the
10 way I would phrase it.

11 When your revenue is dependent on
12 something you can't control, that's a concern
13 for a business.

14 BY MR. TENREIRO:

15 Q. Well, I understand that, but what I am trying
16 to understand is what's the part they can't control?
17 Can't the company say today I wake up in the morning and
18 I do sell XRP or I don't sell it?

19 Can't the company control that part?

20 A. Yes, but that -- that -- the cost of that
21 would be -- we wouldn't be distributing XRP.

22 Q. Right, so what is the part that the company
23 cannot control? Is that the price?

24 A. Well, it's both. It's both the price and the
25 ability to distribute. The --

1 We can sell or not sell XRP, but if we don't sell
2 XRP, we aren't distributing XRP. So we can't distribute
3 XRP without selling XRP, which is at the price we can't
4 control. So there are sort of two knobs we can't
5 control and one we can.

6 Q. Right, and so -- okay.

7 Did the company make efforts to sort of try to
8 bring those knobs within its control?

9 MR. CERESNEY: Objection.

10 THE WITNESS: No.

11 BY MR. TENREIRO:

12 Q. Okay. I think we can move on, and let's go
13 to Exhibit 20.

14 (Thereupon, a document entitled "Exchanges
15 with XRP autobridging? (Aka 'I'm not going to
16 spill the beans just yet') - General Discussion
17 - Xrp Chat)" was introduced as DS Exhibit 20 for
18 identification.)

19 BY MR. TENREIRO:

20 Q. Back to Xrp Chat. Here, I'm going to ask you
21 for page 20. At page 20, I'm going to have some
22 questions there.

23 A. Just one second.

24 Q. Take your time.

25 MR. CERESNEY: Yes, take your time.

1 (Pause.)

2 THE WITNESS: Yes.

3 BY MR. TENREIRO:

4 Q. Is it true you that in 2017, Ripple was
5 heavily focused on promoting XRP to build an awesome
6 payment infrastructure?

7 A. Yeah, I think at the time Ripple was in 2017,
8 Ripple was positioning XRP as reuse and an awesome
9 payments infrastructure, in my words.

10 Q. But -- okay. You say:

11 "One big advantage we have is we control a lot of
12 XRP and we are heavily focused on promoting it in this
13 way. Nobody has this kind of focus on promoting Bitcoin
14 in this way."

15 Do you see that?

16 A. Yes.

17 Q. Your you making that contrast?

18 A. Because we were working on -- we were working
19 on building a payment system around XRP and nobody
20 was -- nobody was currently doing that for Bitcoin.

21 Q. Is anyone currently doing that for Bitcoin?

22 A. Not this type of payment system.

23 Q. You also say, "We control a lot of XRP."
24 Does that also make it different from Bitcoin at this
25 time?

1 A. Well, the distribution of Bitcoin was very,
2 very hard to know at that time. So Toshi, the original
3 creator, probably held an enormous amount of XRP at that
4 time.

5 Q. 2017?

6 A. I think so. It's hard for me to say, like to
7 compare them at that point in time.

8 Q. Well, let's try Exhibit 38.

9 (Thereupon, a 26-page printout entitled
10 "How do you like your misinformation? Please,
11 feel free to correct him - Off-Topic - Xrp Chat"
12 was introduced as DS Exhibit 38 for
13 identification.)

14 BY MR. TENREIRO:

15 Q. This is another July -- this is July 2017. I
16 think the last one I showed you was January. This is
17 from Xrp Chat, 26 pages.

18 Please go to page 10, and I think this one is
19 called, sardonically enough, "How do you like your
20 misinformation? Please feel free to correct it."

21 A. Oh, great.

22 Q. I'm focused on the one that says "There's a
23 huge advantage to having one entity that holds a
24 fraction of an asset."

25 A. I see that.

1 Q. Are you referring here to Ripple holding a
2 significant -- sorry, a significant fraction, I misread
3 that, a significant fraction, are you focusing on
4 Ripple's significant holding of XRP?

5 A. Yes.

6 Q. You say:

7 "Ripple could spend a hundred million on something
8 that has no conventional way of creating revenue, but if
9 it pushed the price of XRP up by one penny over the long
10 term, Ripple would massively profit."

11 Do you see that?

12 A. Yes.

13 Q. How would Ripple significantly profit in that
14 scenario [inaudible]?

15 A. There would be several ways. The obvious way
16 would be the money Ripple could get from the sales of
17 the XRP, but it also could increase the use of the XRP
18 Ledger in other ways as well.

19 Q. And Ripple could profit if the price of the
20 XRP goes up how?

21 A. Over the long term.

22 Q. I am just trying to understand. If the price
23 of XRP goes up one penny, how does Ripple -- so Ripple
24 could profit from sales, that conventional way?

25 A. Right.

1 Q. How could Ripple profit from the price going
2 up one cent by increase but it could also increase the
3 XRP Ledger? I don't understand.

4 A. Well, Ripple's strategy at the time was
5 about -- was about monetiz- -- was about -- let me stop
6 for a second.

7 Ripple was using XRP both for ODL and for -- and
8 incentivizing partners and selling it.

9 Q. Ripple was using -- was selling -- sorry.
10 Ripple was using XRP for ODL at this point in time?

11 A. I think -- I think we were -- at this time,
12 we weren't actually using it but envisioning using it.
13 That would include both what Ripple was doing at that
14 time and what Ripple could do in the future.

15 Q. So if the --

16 If Ripple spent \$100,000,000 in pushing the price
17 up by one penny, that could lead to massive profits in
18 the ODL business?

19 A. That could lead to increase in Ripple's
20 profits, both from sales and from other means of using
21 XRP on its balance sheet.

22 Q. Okay, and ODL sales, right? I thought we
23 talked about how the profits from the ODL --

24 A. Well, you have to --

25 This is speculating in the future over the long

1 term. Because it's mostly sales today doesn't mean it
2 will be mostly sales in the future.

3 Q. But at that point, what would it be? At that
4 point in time, not in the future.

5 A. At that point in time, it was sales instead
6 of incentivizing partners.

7 Q. Okay, and later on, you say:

8 "Nobody has that kind of concentrated interest in
9 any coin distributed primarily by mining."

10 What are you referring to there?

11 A. I explain in the next sentence what I am
12 referring to here, that if some company tried to build a
13 similar business around, say, Bitcoin, they would have
14 to mine that Bitcoin, which means they would start out
15 with a large disadvantage compared to Ripple, because
16 that would be costly.

17 Q. So Ripple's advantage was it created the
18 XRP -- either created or got the XRP for nothing?

19 A. Ripple's advantage is that it was gifted the
20 XRP and didn't have to spend capital or other types of
21 funds in order to acquire it.

22 Q. Is it also fair to say that -- what you are
23 saying here is you have an incentive because you hold
24 that asset that significant fraction of the asset to
25 make these efforts to potentially increase the price by

1 one penny that nobody else has with respect to a
2 cryptocurrency or a coin distributed primarily by
3 mining?

4 MR. CERESNEY: Objection to form.

5 THE WITNESS: I don't know that I'm
6 saying we have that incentive here.

7 BY MR. TENREIRO:

8 Q. Well, further down, you say:

9 "Let me give you a stark example. The Bitcoin
10 Foundation has been trying to raise funds to combat New
11 York BitLicense regulation," etc.

12 A. Right.

13 Q. "But nobody has a concentrated enough
14 interest to pay the bulk of the funds."

15 So is that example conveying to the reader that
16 Ripple has an incentive to do things with respect to XRP
17 because of the significant fraction that it has?

18 A. I'm saying that Ripple has more of -- would
19 be better able to do that, not that Ripple has more
20 incentive.

21 The Bitcoin Foundation would love to have combat
22 the New York BitLicense regulation as we would in a
23 similar situation. It's just that we had more resources
24 to do so because we didn't have to expend those
25 resources to get our XRP as people with Bitcoin would

1 have had to expend the resources to get that Bitcoin.

2 Q. I understand your point about the ability to
3 do it, but your very next sentence says "This is a clear
4 example of a public good freerider problem."

5 A. Right.

6 Q. The "freerider problem" has to do with
7 incentives, right? People's incentives right to ask in
8 their self-interest?

9 MR. CERESNEY: Objection to form.

10 THE WITNESS: What I'm saying here is
11 they value -- they all have an incentive to
12 accomplish a result. They just have an
13 organizational problem.

14 BY MR. TENREIRO:

15 Q. You say:
16 "Nobody has a strong, individual incentive to
17 contribute."

18 A. Nobody has a strong, individual incentive to
19 contribute, right, unless everyone else does.

20 Everyone wants to be the only one who doesn't
21 contribute. You want everybody else to so you don't
22 have to.

23 Q. Right.

24 A. It's an organizational problem. Everybody is
25 equally incentivized. It's just there's no way for them

1 to organize to act on it.

2 Q. Whereas, in the case of Ripple, because of
3 its significant holding of XRP, that organization
4 happens naturally, right? Isn't that what you're saying
5 in the sum and substance of the post?

6 A. I think I'm saying we didn't have to expend
7 depend the funds to get that cryptocurrency. It's more
8 that we would be in a better position to do that,
9 because we would have the funds as opposed to someone --

10 If you imagine a similar entity that used -- you
11 know, that had to spend the funds, they just wouldn't be
12 in as good position. Despite still having incentive,
13 they would still have that same organizational problem.

14 Q. Later, you say:

15 "How much do you think Ripple can and does spend on
16 regulatory issues critical to using cap XRP for its use
17 case? The reason is obvious.

18 "Keeping the regulatory clear for XRP's use for
19 settlement makes a huge difference to Ripple, the
20 company, specifically."

21 Do you see that part?

22 A. Yes.

23 Q. Is that not describing Ripple's -- not just
24 the fact that Ripple started off well ahead of someone
25 who had to mine Bitcoin but actually has an incentive to

1 make efforts, given its significant fraction of XRP
2 holdings?

3 MR. CERESNEY: Objection to form.

4 THE WITNESS: I don't -- I don't really
5 think so, because I say on regulatory issues
6 critical to using XRP for its use case.

7 Every business has the same incentive to
8 resolve regulatory issues critical to their
9 use case. It's just whether they have the
10 means to do it.

11 BY MR. TENREIRO:

12 Q. Okay. So XRP had the incentive, because its
13 business depended on XRP; is that what you're saying?

14 MR. CERESNEY: Do you mean Ripple?

15 MR. TENREIRO: Sorry.

16 BY MR. TENREIRO:

17 Q. Ripple had the incentive, yes.

18 A. Yes. To the extent Ripple's business depends
19 on, for example, what eventually became ODL while that
20 wasn't active at the time, we certainly saw that use
21 case. We were working on regulatory issues deploying
22 that, and we were not only incentivized to do that
23 because that's what we wanted to build our business
24 around, we also had the resources to do it.

1 Q. Did you have an understanding at this point
2 in time, 2017, that the XRP was a security under the --
3 under U.S. law that would -- you know, what consequences
4 that would have for Ripple?

5 MR. CERESNEY: Objection.

6 THE WITNESS: I'm not sure I did at that
7 time.

8 BY MR. TENREIRO:

9 Q. Did there come a time you did develop
10 knowledge of what consequences could flow?

11 MR. CERESNEY: That's a "yes" or "no"
12 question.

13 THE WITNESS: Yes.

14 BY MR. TENREIRO:

15 Q. And what time was that?

16 A. I think that was probably more like 2019, but
17 I can't tell you for sure. I believe it was
18 significantly later than this.

19 Q. Okay, and did you come to --

20 Did there come a point in time where you derived an
21 understanding as to what consequences would [inaudible]
22 retail holders of XRP if XRP was a secured entity under
23 U.S. law?

24 MR. CERESNEY: That's a "yes" or "no"
25 question.

1 THE WITNESS: I have formed several
2 different understandings of that at different
3 times.

4 BY MR. TENREIRO:

5 Q. Don't tell me any understandings that you
6 might have formed from your conversations with lawyers.
7 If you had others that were not formed on that, I would
8 like to know about those.

9 A. There were times when I believed it would
10 make it impossible for individuals in the United States
11 to transact with XRP and there were times when I
12 believed it wouldn't have a significant impact.

13 Q. What's your belief today? Don't tell me what
14 the lawyers --

15 MR. CERESNEY: Well, hold on.

16 To the extent that your belief today
17 could be divided from what you learned from
18 counsel versus things you didn't learn from
19 counsel.

20 BY MR. TENREIRO:

21 Q. Yes.

22 A. Well, I haven't learned anything from counsel
23 on this, and I really don't know. I have not had
24 conversations with counsel about that.

25 Q. So what's your belief today as to whether you

1 would have -- say XRP is a security under U.S. law.

2 What consequences would that have for retail holders?

3 A. My understanding is that it turns on issues
4 of law that I don't understand.

5 Q. Okay.

6 A. My understanding is that I don't have an
7 understanding.

8 Q. Okay. That's fine. So let's go to Exhibit
9 22. Actually, wait a second. Is it still true --

10 So when we were looking at this exhibit and you
11 were sort of describing -- I'm going to paraphrase you,
12 not -- not meaning to exactly repeat what you said, but
13 paraphrasing:

14 Ripple started with an advantage, because it had
15 the XRP that was gifted and didn't have to spend the
16 resources to mine it? That's what's sort of going on
17 here, at least in part?

18 A. Yes.

19 Q. Does that advantage hold true today? Has
20 that changed?

21 A. I think it's still true today. Probably less
22 significant than it was.

23 Q. Why is it less significant today?

24 A. I think it's easier to get capital in the
25 space now than it was then.

1 Q. Between 2017 and today, as far as you know,
2 has any entity acquired sort of a gift of large amounts
3 of Bitcoin?

4 A. Not to my knowledge.

5 Q. What about of Ether? Ethereum?

6 A. The Ethereum Foundation, yeah, a huge amount
7 it was able to distribute to investors and so on.

8 Q. So between 2017 and today, did the Ethereum
9 Foundation gather a huge amount of Ether?

10 A. Not that I know of.

11 Q. Okay. Now let's go to Exhibit -- what did I
12 say? Exhibit 22.

13 (Thereupon, a multi-page document entitled
14 "Valuation Models - XRP The Digital Currency vs.
15 Ripple the Company - XRP Trading and Price
16 Speculation - Xrp Chat" dated 5/25/2017 was
17 introduced as DS Exhibit 22 for identification.)

18 BY MR. TENREIRO:

19 Q. This is an Xrp Chat.

20 This one's called "Valuation Models - XRP The
21 Digital Currency Vs. Ripple the Company - XRP Trading
22 and Price Speculation," and this is still 2017.

23 A. Are you looking at page 13?

24 Q. 13, yes.

25 A. Yes.

1 Q. Okay. So first, you talk about "There's a
2 business that Ripple has providing transaction
3 processing software to banks." Maybe there's -- "has
4 been," perhaps, is what you meant?

5 A. I realize there's a business that Ripple has,
6 providing transaction processing software to banks.

7 Q. Okay. Providing transaction process software
8 to banks. "It could work without XRP and without any
9 blockchain tech." Do you see that?

10 A. Yes.

11 Q. What business is this referring to?

12 A. xCurrent.

13 Q. Okay, and that's still the function of
14 xCurrent today?

15 A. Yes, although it's used more broadly than
16 just banks.

17 Q. And then, you say the -- this is No. 3.

18 "It's everything else. It's governance,
19 compliance." I don't need to read all of it, I don't
20 think.

21 But does this part reflect that Ripple had some
22 challenges in -- you know, getting banks to adopt
23 blockchain technology?

24 A. Not really. It's more about that banks would
25 face those challenges if they were attempting to do it.

1 Q. Did Ripple obtain any significant traction on
2 its xCurrent product in 2017?

3 A. I would have to check the timeline, but I
4 think -- I think we had -- I think we had established a
5 growth pattern by that time.

6 Q. But again, that product did not use XRP or
7 blockchain tech?

8 A. No.

9 Q. Okay.

10 A. It didn't use XRP. It used some Bit-Tech
11 that you could consider blockchain, but it didn't use
12 any public blockchain.

13 Q. Later, you say -- you know -- I mean, you --
14 you should read this yourself, four, five, six and
15 seven, and then you conclude by saying:

16 "If that succeeds, it would increase their price of
17 XRP." So I'm trying to figure out what the "that" is
18 there.

19 A. That is referring to a payment system with
20 XRP as an intermediary asset.

21 Q. And why would that increase the price of XRP?

22 A. The thesis that I'm saying here is that that
23 would create an increase in demand, which could increase
24 the price.

25 Q. Okay, and then you say, "Ripple holds a huge

1 pile of XRP and will be the dominant XRP holder for the
2 foreseeable future."

3 What did you mean there?

4 A. I think it's self-explanatory.

5 Ripple holds an enormous amount of XRP more, than
6 anyone else and there was no way for Ripple to reduce
7 that rapidly.

8 Q. Is that still true today, both of those
9 statements?

10 A. Yes.

11 Q. Then you say:

12 "We are primarily VC finance and we get revenue
13 from selling software to banks. We don't use our XRP as
14 a bank account, but as a strategic weapon."

15 Can you explain what you mean there by "as a
16 strategic weapon"?

17 A. I mean we use it to incentivize partners.

18 Q. Can you explain a little more?

19 A. Sure. This -- this model relies on using XRP
20 as an intermediary asset. It relies on things like
21 market makers, and by having XRP, we can do things like
22 lease it to market makers so that they don't have to
23 front their own capital, which is not using XRP as a
24 bank account but as a tool.

25 Q. So the bank account example is to spend it --

1 to sell it and to spend it. This example is to provide
2 capital to people that might not have capital?

3 A. Right.

4 Q. Okay. Then you say:

5 "Though we do sell for some revenue, we just don't
6 need to for salaries or to keep the lights on."

7 A. Yes.

8 Q. Do you see that? Is that still true today?

9 A. I would have to work out the math to tell you
10 precisely whether it is or isn't.

11 Q. Right. Is it fair to say that at some
12 point -- do you know whether at some point Ripple used
13 XRP as a bank account?

14 MR. CERESNEY: Objection.

15 THE WITNESS: Over -- over time, our XRP
16 sales became a more significant source of
17 revenue.

18 BY MR. TENREIRO:

19 Q. Did that correlate with when the price of XRP
20 went up?

21 A. I think it correlates with both the price and
22 the volume.

23 Q. Then you say:

24 "Anyone who gets XRP from us as part of some deal
25 with a lockup has their incentives aligned with ours."

1 Just explain: Why does a lockup align -- first of
2 all, "ours" means Ripple?

3 A. Yes.

4 Q. Okay. Please explain why the lockup aligns
5 the incentives of Ripple with "someone who gets XRP from
6 us as part of some deal."

7 A. If you have XRP and you're not subject to any
8 sort of agreement that prevents you from selling it, you
9 don't care about the long-term price. You just care
10 about the short-term price. The price goes up to your
11 target and you sell, and you don't care what happens a
12 year later.

13 If you are guaranteed to hold an asset over a
14 period of time, the long-term price becomes more
15 interesting to you than the short-term price.

16 Q. By "interesting," you mean more desirable?

17 A. It's more important to you. You would be
18 more concerned with the long-term price than the
19 short-term price.

20 Q. Then you say, "They want the long-term price
21 of XRP to go up, too."

22 Are you saying Ripple wants the price of XRP long
23 term to go up, just like the people who are in the
24 lockup agreements?

25 A. Yes.

1 Q. Okay. Is this a recognition of what we
2 discussed earlier, that in the long term, Ripple wants
3 the price of XRP to go up at least as of 2017?

4 MR. GERTZMAN: Objection to the form.

5 THE WITNESS: Ripple benefits from an
6 increase in the long-term price of XRP.

7 BY MR. TENREIRO:

8 Q. Is that still true today?

9 A. Yes.

10 Q. And to the extent that there are -- you know,
11 I'm just going to use your words.

12 To the extent there are -- anyone who gets XRP from
13 Ripple is part of some deal with a lockup, are their
14 interests still aligned with Ripple's today in the price
15 going up?

16 A. They share the interest in the long-term
17 price.

18 Q. Long term?

19 A. At least over the duration of their lockup
20 agreement.

21 Q. And the price going up?

22 A. Yes.

23 Q. Okay. To the extent that Ripple's interest
24 in the long-term price of XRP is for the price to go up,
25 is that -- you know, from your understanding of this

1 space, the same as the interest of someone who doesn't
2 have a lockup but may be holding XRP as a long -- for
3 the long term?

4 A. No.

5 Q. Why not?

6 A. Because someone is holding for the long term
7 can sell at any time their sentiments change.

8 Q. What they care about is for the price to go
9 up between when they buy it and sell it in the long
10 term; is that what you mean?

11 A. Right, they would prefer a short term
12 increase over -- they would prefer a short-term increase
13 even if it's followed by a long-term drop.

14 Q. They don't care after they sell, essentially?

15 A. Which could be whatever time they decide they
16 want to leave.

17 Q. Between the time when they buy and when they
18 decide to leave, are their interests aligned with
19 Ripple's?

20 A. No.

21 Q. Why?

22 A. Because Ripple's interested in the long-term
23 price and they are not.

24 Q. Okay, so Ripple --

25 Are you saying Ripple does not have any interest in

1 the price going up in the short term, as long as it
2 still goes up in the long-term?

3 A. I'm saying Ripple would not prefer a
4 short-term rise in price if there's other compensating
5 factors that make that worse.

6 We would prefer it in the absence of -- in the
7 absence of any other [inaudible] with just a short-term
8 price nothing else happened. There's no reason we
9 wouldn't prefer that.

10 Q. I understand there could be worse things that
11 make it worse, but everything else being equal -- you
12 know, Ripple's interested in the long-term increase in
13 the price.

14 Does that mean it's not interested in the long --
15 in the short-term interest -- in those -- short-term
16 rise in the price?

17 A. I don't believe there exist scenarios where
18 all other things are equal. So when you construct this
19 scenario, you say, "All things being equal, Ripple would
20 prefer this," I don't think there's any realistic
21 scenario where all other things are equal.

22 There are always other facts that could be averse
23 to Ripple's interests. For example, a long-term drop in
24 price.

25 Q. So a long-term --

1 A short-term increase could lead to a long-term
2 drop in price?

3 A. Absolutely, yes.

4 Q. Any other example of something that might
5 have adverse consequences to Ripple following a
6 short-term increase in price?

7 A. I mean, I can construct a number of
8 hypotheticals where that could happen.

9 Q. Okay. One second.

10 (Pause.)

11 MR. TENREIRO: Let's look at Exhibit 23.

12 And for Madam Court Reporter, we will
13 have to e-mail that one to you. It's
14 different from the one we e-mailed to you, so
15 let's make a note, please.

16 (Thereupon, a multi-page document entitled
17 "For people asking about 'Coin vs Protocol'"
18 dated "29 juin" was introduced as DS Exhibit 23
19 for identification.)

20 BY MR. TENREIRO:

21 Q. Pages 4 and 5 of 13. This appears to be a
22 Reddit thread. Four and five.

23 A. Oh, yeah. I don't see -- oh, at the top.
24 Are you talking about the top of page 5?

25 Q. Yes. So at bottom, there is an "@JoelKatz."

1 A. That is me.

2 Q. And then it continues on page 5. So you say
3 ... just read what you're responding to, the last
4 sentence of the comment you responded to.

5 "I mean, the whole reason most speculators are
6 buying XRP is due to a perception that it will be
7 permanently tied to the success of Ripple."

8 Do you see that part?

9 A. I see that.

10 Q. Is it fair to say that you had an
11 understanding -- this post appears to be from -- I think
12 it's 2017. Yeah. In the front page, it's in French,
13 but I'm sure you can read it. It's June of 2017.

14 A. Yes.

15 Q. All right. So is it fair to say that in June
16 of 2017, you, Mr. Schwartz, had an understanding that
17 some speculators were buying XRP?

18 A. I did believe at the time that some
19 purchasers purchased for speculative purposes.

20 Q. I'm sorry, that some purchasers what?

21 A. Purchased for speculative reasons.

22 Q. Are you aware of any efforts that Ripple made
23 at that time to stop people from purchase for
24 speculative reasons?

25 A. I'm not aware of any that had that as a

1 specific objective.

2 Q. As opposed to a general objective or what do
3 you mean?

4 A. Well, for example, if someone was going to
5 speculate because of some false information and we were
6 countering that narrative, that might dissuade them from
7 speculating.

8 Q. All right, and when you were -- when Ripple
9 was ... when -- when Ripple was sort of responding to
10 what it considered to be actually inaccurate accurate
11 narratives, was it doing that with the purpose for
12 dissuading people from speculating?

13 A. If they would have speculated on the base of
14 a false narrative, absolutely.

15 Q. Ripple wanted to dissuade people from
16 speculating on the basis of a false narrative?

17 A. Yes.

18 Q. What steps did Ripple take, if any, to stop
19 people from purchasing XRP for speculative reasons?

20 A. I am not aware of any.

21 (Thereupon, an informal discussion was
22 held off the record.)

23 BY MR. TENREIRO:

24 Q. Okay. You say --

25 "I wouldn't say permanently" is your first

1 response?

2 A. Yes.

3 Q. So does that mean that you agreed that --
4 that some -- speculators or most speculators were buying
5 XRP due to a perception that XRP will be tied to the
6 success of Ripple, at least for some time?

7 A. No.

8 Q. What does it mean?

9 A. It means that I -- I -- that I am choosing to
10 respond to his -- I -- I'm choosing to argue that if
11 such a thing exists, it would be expected to be reduced
12 over time.

13 Q. Okay. If such a thing exists?

14 A. Yes.

15 Q. Okay. Later, you say:

16 "There's no player that plays Ripple's role in XRP
17 for Bitcoin or Ether."

18 Do you see that?

19 A. Yes.

20 Q. What does that mean?

21 A. That means there's no party that we know of
22 that holds -- that both holds that larger fraction of
23 the native asset and is sort of a participant.

24 Q. Does that remain true today?

25 A. I don't know.

1 Q. Okay. Did it remain true last year?

2 A. I would have thought so at the time, but I
3 don't know.

4 Q. On the next page, you say:

5 "For at least the near future, there seems to be
6 pretty good alignment of incentives between Ripple and
7 XRP holders. Ripple is the largest XRP holder today.

8 "Ripple will almost certainly hold the significant
9 share of XRP for years, and XRP is likely to remain
10 Ripple's largest asset for years."

11 Can you explain what that meant in 2017?

12 A. Yeah. What that meant is that there is some
13 alignment of incentives between Ripple and other XRP
14 holders.

15 Q. And to the extent Ripple's -- so okay. Which
16 incentives are aligned?

17 A. They would both want the utility of the
18 ledger. They would both want more liquidity for XRP.

19 They would have different interests in price,
20 Ripple in the long-term price and holders in the
21 short-term price, but they would have interests in
22 price.

23 Q. Well -- I'm sorry. How do you know that the
24 holders have a short-term interest and not long-term?

25 A. I am assuming these are holders that aren't

1 subject to any sort of lockup that will prevent them
2 from selling their XRP.

3 Q. Does this sort of statement that for at least
4 the near future -- well, how -- sorry.

5 The statement "Ripple will almost certainly hold a
6 significant share of XRP for years" -- does that
7 statement still hold true today?

8 A. Yes.

9 Q. "XRP is likely to remain Ripple's largest
10 asset for years." Still true today?

11 A. Yes.

12 Q. "For at least the near future, there seems to
13 be pretty good alignment of incentive between Ripple and
14 XRP holders."

15 To the extent that -- you know, your answer was
16 about the incentives with respect to liquidity and
17 utility, are those still -- still aligned today?

18 A. I'm -- I'm not as convinced today as I was at
19 that time.

20 Q. Why?

21 A. Because it doesn't seem necessarily the case
22 that someone who holds XRP, even if they were interested
23 in the short-term price, would necessarily care about
24 things like the utility and liquidity if they don't
25 necessarily correlate to short-term price. So they

1 might be interested. They might not. But I can't -- I
2 don't believe today that I can draw a line as brightly
3 as I thought I could at that time.

4 Q. But I think you said earlier if Ripple sort
5 of walked away from XRP, you believe -- you believe
6 there might be a short-term decrease in price because of
7 unsettling expectations?

8 A. There could be.

9 Q. So the expectation, as you understand it
10 today, is that people -- that Ripple will not walk away
11 from XRP?

12 A. Right. Just as people don't expect the
13 Bitcoin Foundation to abandon Bitcoin or the Ethereum
14 foundation to abandon Ethereum.

15 Q. And the expectation is that Ripple would not
16 abandon the XRP Ledger? Not just the XRP, but the XRP
17 Ledger; is that fair?

18 A. At least not -- not suddenly, or not for no
19 rational reason.

20 Q. Okay. Why is it -- I'm sorry.

21 We talked about this already. Let's move to 24,
22 which I am also going to have to e-mail to Ms. Kerr,
23 because it's different from what I sent you.

24 (Thereupon, an informal discussion was
25 held off the record.)

1 BY MR. TENREIRO:

2 Q. It's another Reddit thread. This also
3 appears to be from -- actually, Jon probably is going to
4 identify the year, but I can't tell you -- I think it's
5 2017 or 2018.

6 (Thereupon, an informal discussion was
7 held off the record.)

8 BY MR. TENREIRO:

9 Q. November 2017? Okay. This one is called
10 "XRP will go to zero, because..."

11 Do you see that?

12 A. Yes.

13 Q. Do you understand this is a reference to the
14 price of XRP going to zero?

15 A. I don't think there's a distinction between
16 the price going to zero and the -- you know, the value
17 of the ledger or it not having any value, not being
18 transactable.

19 Q. Okay.

20 A. Those are all liquidities.

21 Q. This is a short-term reference to the number
22 zero. Does that reasonably indicate that's a reference
23 to the price?

24 A. I don't think -- I think in context, nobody
25 meant the price might go to zero and then recover. They

1 meant like it would die.

2 Q. You're saying both of --

3 Well, the value of the ledger not having any value
4 would be -- you're saying there's no distinction between
5 that and the price of XRP going to zero; is that right?

6 A. I am saying there's no distinction between
7 the price of XRP going to zero and essentially a failure
8 of the XRP Ledger system such that you couldn't transact
9 in XRP, so it wouldn't happen at full price. Again,
10 that's a difference between zero and no number.

11 Q. Okay, so then you say:

12 "I will tell you what I think the biggest risks
13 are. One, someone else does almost exactly the same
14 thing Ripple does, but does it better.

15 "This is mitigated by the fact that Ripple has such
16 talented people and has a lead, but you never know."
17 What did "the lead" mean there? What lead?

18 A. This was 2017?

19 Q. Uh-huh.

20 A. It's actually hard for me to say today.

21 Because that was a transition period between a
22 couple different strategies that it's hard for me to say
23 today what I meant, but I did believe we were better at
24 something.

25 Q. Do you still believe that today? It's true

1 today?

2 A. I think that's true with respect to RippleNet
3 and -- and financial institutions to use digital ledger
4 technologies. I wouldn't say that's true for
5 technologies like the XRP Ledger.

6 Q. And why would -- why would the fact that you
7 were better at something, whatever that something was,
8 mitigate against the risk that XRP will go to zero?

9 (Pause.)

10 THE WITNESS: I -- I -- it looks like in
11 this post here --

12 Rather than responding to the title of
13 the thread of why XRP would go to zero, it
14 looks like I'm more talking about risks to
15 Ripple and Ripple's business model, and I'm
16 not really sure why I'm doing that.

17 I may have answered the question that I
18 wish was asked rather than the question that
19 was asked. Oh, I see. Because in the
20 question, it says things like "What mistakes
21 would the Ripple management have to make?"

22 What --

23 BY MR. TENREIRO:

24 Q. For it to crash?

25 A. I don't know if that's what I responded to.

1 It does look like I more responded to the question I
2 wish was asked than the question that was actually
3 asked.

4 Q. What is the question you wish was asked?

5 A. What the risks were to Ripple or to Ripple's
6 business model or -- or so on.

7 Q. Why did you wish that question were asked?

8 A. I think that's a question I'm very well
9 positioned to answer as opposed to opining on the XRP
10 ecosystem generally.

11 Q. Let's look at the question. "XRP will go to
12 zero because ... I read a fair amount of XRP in the past
13 few months and the overwhelming majority of the
14 sentiments seem to be positive. While it is easy to see
15 why people want to speculate a price of 20 or 30 in the
16 next year, there has somebody some downside risk
17 associated with the currency.

18 "To be clear, I'm bullish on XRP, but I would like
19 to at least have a handle on what the risks are and what
20 could cause it to significantly drop in price in the
21 coming months/years. What mistakes would the Ripple
22 management team have to make for it to crash?

23 "What obstacles if not cleared would stop XRP dead
24 in its tracks? Sorry to take away from the clearly
25 positive post, but I feel a clear-headed look at the

1 actual risk would do some good."

2 Do you see that?

3 A. Yes.

4 Q. Is it fair to say, just reading this today,
5 this entire post was speculating on the price of XRP?

6 A. The question, yes.

7 Q. And is it fair to say --

8 I -- I understand that maybe you were -- so for
9 in -- for this post, you remember that three years ago
10 you were trying to answer a different question than the
11 one that was asked?

12 A. I don't remember reading the question. I may
13 not have read the question at this time.

14 I definitely would have read the prior comment,
15 assuming that their in the same -- but they are not even
16 necessarily in the same order now as they were then,
17 because they are sorted by -- I believe not necessarily
18 by time.

19 I don't know whether I was responding to the
20 question or sub-question, but reading this today, this
21 more look like what I would have written as a list of
22 risks to Ripple, but I can't --

23 I -- I really -- I write hundreds and hundreds of
24 posts. Sometimes I carefully study the thing I'm
25 responding to, and sometimes I have a particular point

1 that I want to make and I just take advantage of any
2 opportunity to make the point I wanted to make. This
3 doesn't read like what I would have said are the biggest
4 risks to XRP at the time.

5 Q. What were the biggest risks to XRP at the
6 time?

7 A. 2012?

8 Q. Uh-huh. We're talking about the price,
9 because -- I mean, what were the biggest risks to the
10 price, as the question posed?

11 A. I think regulatory risk. There was a concern
12 at the time of whether people trying to use
13 cryptocurrencies would be money transmitters. I think
14 that was the dominant concern at that time.

15 I think there was a concern that -- that crypto --
16 that the whole cryptocurrency ecosystem could be
17 abandoned or -- or not used and people just wouldn't be
18 interested in it or would discover -- you know, some
19 other system that would work better. I think --

20 I think a technical problem with the XRP Ledger
21 that made it unable to move XRP, like at that -- that --
22 that was so early that we were still worried that
23 perhaps there might be an actual fundamental problem.
24 Any technology that's new like this, you worry someone
25 might find some fundamental flaw and then, basically,